Draft Initial Study/Mitigated Negative Declaration
County of San Bernardino
Department of Public Works

Lake Gregory Regional Park
Sitewide Sediment Management Project

Lead Agency:

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SECTION 1 - INTRODUCTION

This Initial Study has been prepared to identify and assess the anticipated environmental impacts of implementing the Lake Gregory Regional Park Sitewide Sediment Management Project (project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 et seq.) and State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. An Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.1 PROJECT PURPOSE AND NEED

The purpose of the Lake Gregory Regional Park Sitewide Sediment Management Project is to address the current deterioration of the existing Lake Gregory public beach along the lake's swim area, reduce sediment loading in the lake, and to continue the routine operations and maintenance elements at the lake.

1.2 INITIAL STUDY ORGANIZATION

This Initial Study is organized as follows:

Introduction: Provides the regulatory context for the review along a brief summary of the CEQA process.

Project Information: Provides fundamental project information, such as the project description, project location and figures.

Lead Agency Determination: Identifies environmental factors potentially affected by the project and identifies the Lead Agency's determination based on the initial evaluation.

Mitigated Negative Declaration: Prepared when a determination can be made that no significant environmental effects will occur because revisions to the project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels.

Evaluating Environmental Impacts: Provides the parameters the District uses when determining level of impact.

CEQA Checklist: Provides an environmental checklist and accompanying analysis for responding to checklist questions.

References: Include a list of references and various resources utilized in preparing the analysis.

List of Preparers: The names of persons who prepared or participated in the Initial Study.

SECTION 2 - REGULATORY FRAMEWORK

The County of San Bernardino Department of Public Works, Special District, has identified that the Lake Gregory Regional Park Sitewide Sediment Management Project meets the CEQA Guidelines Section 15378 definition of a project. CEQA Guidelines Section 15378 defines a project as the following:

> *"Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.*

In accordance with CEQA (Public Resources Code Sections 21000-21189.91), this Initial Study has been prepared to evaluate potentially significant environmental impacts resulting from the construction improvements and routine operation and maintenance (O&M) plan associated with the Lake Gregory Regional Park Sitewide Sediment Management Project. In accordance with Section 15063 of the State CEQA Guidelines, this Initial Study is a preliminary analysis prepared by the County of San Bernardino Department of Public Works, Special Districts, as the CEQA Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed project.

Following a preliminary review of the proposed project, the County has determined that the project is subject to the guidelines and statutes of CEQA. As the Lead Agency, the County has reviewed the project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project will have a significant effect on the environment, with adherence to the mitigation measures identified in this Initial Study. This Initial Study/Mitigated Negative Declaration (IS/MND) addresses the direct, indirect, and cumulative environmental effects of the proposed Project. This IS/MND reflects the Lead Agency's independent judgement and analysis.

The environmental documentation outlined above, which is ultimately determined by the County in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and/or other discretionary approvals would be required.

The environmental documentation is subject to a public review period. During this review, comments on the document relative to environmental issues should be addressed to the County in writing. Following review of any written comments received, the County will consider these comments as a part of the project's environmental review and will include them with the Initial Study documentation for consideration by the County's decision-makers.

SECTION 3 - DETAILED PROJECT DESCRIPTION

The San Bernardino County Department of Public Works, Special Districts, on behalf of the San Bernardino County Regional Parks Department, proposes to construct improvements and maintain lake sediment levels within, and adjacent to Lake Gregory Regional Park in Crestline, California.

3.1 LOCATION

Lake Gregory Regional Park is located at 24171 Lake Drive in the unincorporated community of Crestline, within western San Bernardino County. Lake Gregory is bounded by Lake Drive to the north and northeast, San Moritz Drive to the southeast and south, and Lake Gregory Drive to the west. On the western shore of the lake is a u-shaped swimming beach that is the focus of the proposed beach improvements. The Library Basin is located to the west of the swimming area. The San Moritz Channel Basin is located near the south/eastern portion of the lake, adjacent the San Moritz Lodge. The Lake Gregory Dam is located in the northeast section of the lake with Camp Switzerland stockpile site to the north of the dam. In addition, there are approximately 34 inlets along the lake perimeter. Refer to *Figure 1, Regional Vicinity; Figure 2, Project Vicinity; Figure 3, Project Site*; and *Figure 4, Inlet Map,* and Appendix A*, Project Plans*.

The San Bernardino County Regional Parks Department operates Lake Gregory, via concession contract, as a regional park facility that offers year-round recreational opportunities to its visitors. Lake Gregory welcomes

approximately 100,000 patrons each year. Within the regional park, Lake Gregory physically encompasses approximately 84 water surface acres for swimming and water-based recreation.

Lake Gregory Regional Park, in operation since completion of the Lake Gregory Dam in 1938, offers a variety of recreational opportunities to its patrons, including fishing, boating, swimming, picnic facilities, a skate park, a dog park, and walking and fitness trails. The landscape surrounding and adjacent to Lake Gregory is nestled within the broader Oak Conifer Woodland vegetation community, but within the project area consists of both native and non-native vegetation types. Residential and commercial development exists adjacent to and around the lake.

Lake Gregory is a man-made lake that is naturally fed by storm runoff and snow melt from the east and west forks of Houston Creek. The normal (ordinary high) water level of the lake is set by the Lake Gregory Dam spillway at approximately 4,526 feet above mean sea level. The capacity of the lake is increased in the spring and summer months via the installation of flashboards on the lake spillway. The flashboards are removed in September of each year. Water levels at the lake may fluctuate by up to five feet below the spillway elevation depending on the season's precipitation. Regional Parks, via concession contract, is responsible for year-round operation and maintenance of the lake[1].

The proposed project includes both construction of improvements and routine maintenance elements. The construction of various improvements is necessary to improve recreational features and infrastructure supporting the Regional Park, primarily for water quality, recreational purposes, and public safety.

<u>Construction of improvements includes the following actions:</u>

- Improvement to the Swim Beach area including dredging, regrading, and placement of a permanent in-water barrier.
- Improvements to South Beach including dredging and regrading.
- Improvement to the majority of lake inlet locations along the lake perimeter with the addition of headwall structures and rip rap at some inlets.
-

<u>Maintenance includes the following actions:</u>

- On-going sediment management and removal of existing and future sediment accumulation.
- Routine maintenance of Lake Gregory, San Moritz Channel Basins, and Library Basin, including Lake Gregory beach grading, lake and basin structural repairs and debris/trash removal, inlet/outlet repairs, access road and appurtenant structure repairs, slope repairs, maintenance of lake water surface/water quality operational standards, vector control.

[1] Regional Parks operates Lake Gregory (via concession agreement). Special Districts is "contracted" to perform various tasks, including flashboard install/removal, basin(s) clean-out, etc.

3.2 PROJECT IMPROVEMENTS

Swim Beach and South Beach

The existing swim beach has deteriorated over time and has uneven beach area, large potholes, depressions, and steep slopes. The goal of the improvements to the swim beach area is to improve public safety including Americans with Disabilities Act (ADA) compliance and the waterpark attraction, which serve as a venue for day camps, sporting events, training, and education.

The proposed improvements in this area include flattening the beach area to a uniform 12:1 slope, and the installation of an in-water, beach stabilization wall to create a horizontal and vertical grade control marker defining the beach. The stabilization wall would be placed in-water and would be approximately 6-inches wide, spanning from the north to south shore. The beach stabilization wall will be constructed to create a horizontal and vertical grade control marker defining the beach. Future maintenance crews can use the top of beach stabilization wall as a vertical marker to restore grades when grooming the beach sand in the beach area. A portion of the lake invert in the vicinity of the West Beach will be graded to create a deepened area that will have a minimum 10ft of water depth at the typical lowest water level during the swim season. A portion of the South Beach would require dredging and regrading for shoreline stabilization. The lake dredging and grading that would occur as a part of the Sediment Management Plan (construction element) would result in a grading cut of approximately 69,428 cubic yards of sediment from the lake bottom. Construction of the proposed swim beach improvements will result in a grading fill of approximately 8,932 cubic yards of soil. Approximately 4,312 cubic yards of the fill will be imported sand to create a high contrast sand surface in the swim beach area to improve visitor safety. Approximately 59,496 cubic yards of sediment will be exported from the site to a designated stockpile area near Camp Switzerland.

Lake Inlets

There are numerous storm drain inlets/outlets[2] that exhibit significant erosion. In some areas erosion is extreme and has undermined the storm drain and created a potentially dangerous situation. These inlets range in size from 4-36 inches. At some inlet locations there are multiple inlet features (i.e., more than one pipe), refer to Table 1, *Lake Inlets*. These inlets function to maintain the water level at the lake. As part of the improvement project, a new headwall/weir box would be installed at approximately 19 inlet locations, and riprap pads would be installed at approximately 22 inlet locations. Overall, twenty-two (22) inlet locations would be reconstructed to remediate the erosion damage and install erosion control/protection measures that will limit future erosion damage. Riprap would be installed near all basin inlets to prevent erosion (approximately 375 square-foot footprint per site). The basin weir box outlet structure is intended to retain sediment in the basin and decrease the likelihood of it flowing through the basin into Lake Gregory.

Table 1
Lake Inlets

Inlet Location #	# of Features	Existing Features	Construction Improvements
001	4	Existing 18" CMP, Existing Double 24" CMP, Existing 18" CMP	(1) construct reinforced concrete cutoff wall, (2) sawcut existing CMP section, and install type 2 straight concrete headwall, (3) construct 10'x10' riprap energy dissipators

[2] The *Lake Gregory Operations and Maintenance Manual* (O&M Manual) references the terms inlet/outlet interchangeably.

Table 1
Lake Inlets, continued

Inlet Location #	# of Features	Existing Features	Construction Improvements
002	1	Existing 36" CMP	(1) construct 10'x10' riprap energy dissipator, (2) construct type-1 straight headwall with cutoff wall
003	1	Existing 24" CMP	(1) construct 10'x10' riprap energy dissipator, (2) construct type-1 straight headwall with cutoff wall
004	1	Existing 36" CMP	(1) sawcut CMP at pipe penetration point. install type 2 straight concrete headwall, (2) remove existing SD pipe, (3) construct rip-rap erosion control blanket, (4) construct protective railing, (5) sawcut CMP at pipe penetration point. install type 1 straight concrete headwall
005	1	Existing 24" CMP	(1) construct 10'x10' riprap energy dissipator, (2) construct type-1 straight headwall with cutoff wall
006	2	Existing 36" HDPE, Existing 12" PVC	(1) sawcut CMP at pipe penetration point. install type 2 straight concrete headwall, (2) construct 10'x10' riprap energy dissipator
007	2	Existing 24" HDPE, Existing 60" HDPE	No change
008	1	Existing 24" CMP	(1) construct 10'x10' riprap energy dissipator, (2) construct new 24" CMP, (3) construct reinforced concrete collar, (4) abandon existing SD pipe in place and backfill with CSLM, (5) construct type-1 straight headwall with cutoff wall, (6) construct protective railing
009a	3	Existing18" CMP, Existing 18" CMP, Existing 24" CMP.	(1) sawcut CMP at pipe penetration point. install type 2 straight concrete headwall, (2) construct rip-rap erosion control blanket, (3) remove and properly dispose of existing abandoned CMP SD.
009b	2	Existing 24" CPP Existing 12" PVC (Blue)	(1) remove existing SD pipe, (2) construct rip-rap erosion control blanket, (3) construct type-1 straight headwall with cutoff wall
010	1	Existing 24" CMP	(1) remove and properly dispose of existing abandoned CMP SD, (2) construct rip-rap erosion control blanket
011	2	Existing 48" CMP with concrete headwall, Existing 32" CMP with concrete headwall	No change
012	1	Existing 24" CMP	(1) construct 10'x10' riprap energy dissipator, (2) construct type-1 straight headwall with cutoff wall

Table 1
Lake Inlets, continued

Inlet Location #	# of Features	Existing Features	Construction Improvements
013	1	Existing 36" CMP	(1) sawcut CMP at pipe penetration point. install type 2 straight concrete headwall, (2) construct concrete collar at pipe penetration and extend pipe, (3) construct reinforced concrete collar, (4) abandon existing SD pipe in place to limits shown and backfill with CSLM, (5) construct rip-rap erosion control blanket, (6) construct protective railing
014	1	Existing 24" CPP	(1) construct 10'x10' riprap energy dissipator, (2) construct type-1 straight headwall with cutoff wall, (3) construct protective railing
015	1	Existing 15" Solid Metal Pipe	No change
016	1	Existing 12" PVC (Blue)	No change
017	1	Existing 18" CMP	No change
018	1	Existing 24" CMP	No change
019	1	Existing 24" CMP with 27' deep water gauge	No change
020	1	Existing 24" CMP	(1) construct rip-rap erosion control blanket, (2) construct type-1 straight headwall with cutoff wall
021	1	Existing 24" CMP	(1) construct rip-rap erosion control blanket, (2) construct type-1 straight headwall with cutoff wall
022	1	Existing 16" CMP	(1) construct rip-rap erosion control blanket, (2) construct type-1 straight headwall with cutoff wall
023	1	Existing 24" CMP	(1) cut back CMP to pipe penetration point. install type 1 straight concrete headwall, (2) construct 10'x10' riprap energy dissipator
024	1	Existing 12" PVC	(1) sawcut existing CMP section, and install type 2 straight concrete headwall, (2) construct 10'x10' riprap energy dissipator
025	0	Spillway for #026 & #027	No change
026	1	Existing 24" PVC	No change
027	1	Existing 24" PVC	No change
028	1	Existing 18" CMP	(1) cut back CMP to pipe penetration point. install type 1 straight concrete headwall, (2) sawcut existing CMP section, and install type 2 straight concrete headwall, (3) construct 10'x10' riprap energy dissipator
029	1	Existing 24" CMP	(1) cut back CMP to pipe penetration point. install type 1 straight concrete headwall, (2) construct 10'x10' riprap energy dissipator
030	1	Existing 12" Water Pipe	(1) construct 10'x10' riprap energy dissipator
031	1	Existing 12" CMP	No change
032	1	Existing 18" CMP	(1) construct 10'x10' riprap energy dissipator
033	3	Existing Triple 60" RCP	No change

Notes: CMP: Corrugated Metal Pipe; RCP: Reinforced concrete pipe; HDPE: High density polyethylene; PVC: Polyvinyl chloride; SD: storm drain; CLSM: Controlled low-strength material

San Moritz Channel Basins

Historically, sediment also accumulates at the southerly tip of the lake near Houston Creek South outlet to the lake adjacent to San Moritz Lodge and along the bank at the Houston Creek East outlet to the lake. The Houston Creek South outlet to the Lake Gregory located adjacent to the San Moritz Lodge was previously improved by constructing an in-line multi-cell debris basin and improving the existing access road by paving over it with approximate 14-foot-wide soil cement armoring along the northern and western perimeter of the existing baseball field for maintenance and vehicular access. The project will improve the site by re-stabilizing the inflow to the lake.

Project Improvements Construction

Construction for these improvements is anticipated to occur over three phases. Refer to Table 2, *Project Improvements* identified below.

Table 2
Project Improvements

Phase	Duration	Improvement Activity	Construction Equipment
Phase 1	4 weeks	Dewatering / clearing & grubbing	Pumps, sweepers/scrubbers, tractors/loaders/backhoes
Phase 2	12 weeks	Grading	Cement and mortar mixers, sweepers/scrubbers, tractors/loaders/backhoes, skid steer loaders, rubber-tired loaders, rollers, graders, excavators
Phase 3	6 weeks	Inlet / storm drain improvements	Cement and mortar mixers, sweepers/scrubbers, tractors/loaders/backhoes, off-highway tractor

All stockpile materials will be trucked to Camp Switzerland. Earthwork quantities are estimated at 26,300 cubic yards imported and exported, for a duration of 35 days. The project does not require use of pile driver or vibratory rollers.

3.3 OPERATIONAL AND MAINTENANCE ACTIVITIES

The project includes a maintenance element, the creation and implementation of the *2024 Lake Gregory Operations and Maintenance Manual Update* ("O&M Manual"). The O&M Manual is comprised of four sections: Resource Agency Permit Compliance[3], Debris Basin Maintenance, Lake Dredging, and General Lake Gregory Operations and Maintenance. It should be noted these elements are already occurring as routine operation of the lake.

The O&M Manual incorporates required maintenance activities for each distinct area of the lake including the debris basins and creek outlets (inlets) into the lake. Each area has unique physical characteristics that require ongoing operations and maintenance. Routine maintenance of the lake and adjacent basins is essential to improve water clarity and quality, enhance recreational features, and improve fishery habitat resources of the

[3] The lake and the adjacent riparian and wetland areas are within the jurisdiction of the California Department of Fish and Wildlife (CDFW), the Lahontan Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (USACE) which require regulatory permits for the construction improvements and/or routine O&M activities and include the California Fish and Wildlife Code 1602 Lake and Streambed Alteration Agreement permit and Clean Water Act Sections 401 and 404 permits. The O&M Manual outlines guidelines for operation and maintenance of the lake and facilities, as they pertain to these permits.

lake. The O&M Manual includes year-round maintenance activities with seasonal restrictions on certain activities. The below routine O&M elements are summarized below in Table 3, *Operation and Maintenance Elements*.

Table 3
Operation and Maintenance Elements

Location	O&M Elements	Schedule / Frequency	Maintenance Equipment
Swim Beach	• Swim beach area lake bottom footfall and/or foot contact grooming	• As necessary, limited to the Park Non-operational season (September through March)	• Debris rakes, power boat pulled drag
Lake Inlets	• Regular visual inspection and removal of debris	• quarterly basis year-round and before each forecast storm	• Hand tools/hand
San Moritz Channel Basins	• Sediment Removal • Channel/Basin Lake Delta Dredging • Maintenance of Access Road and other Appurtenances	• Semi-annual basis, after large storm events (Sediment Removal) • Between Labor Day and March 1st (Dredging)	• Tracked excavator with minimum reach of 30-ft • Wheeled loader with 3-yard bucket • Three-axle dump truck
Library Basin	• Sediment Removal • Maintenance of Access Road and other Appurtenances • Storm Damage Repair and Restoration Projects	• Semi-annual basis, after large storm events (Sediment Removal)	• Tracked excavator with minimum reach of 30-ft • Wheeled or tracked mini-skid steer (Bobcat) • Three-axle 10-yd dump truck
Lake (Sitewide)	• Lake Ecology Control/Monitoring Program • Lake Water Surface Maintenance • Algae, Aquatic Plant and Turbidity Control • Insect Control • Erosion Control • Trash Collection	• Ranging from daily to annually	

Swim Beach

The swim beach area requires routine maintenance for grooming below the water line to a depth of six (6) feet based on current elevation. Grooming will be accomplished manually and mechanically. Workers with landscape and debris rakes will manually groom the lake bottom surface, removing foreign objects and decaying plant material to an approximate depth of three feet while ensuring a consistent, contoured, and safe foot contact area for swimmers. A power boat pulled drag will be used at low speed to accomplish the same tasks and minimize turbidity to an approximate depth of six (6) feet.

Lake Inlets

Regular maintenance is required at each lake outlet/inlet. The lake inlets require routine maintenance and repair to maintain and reset the water level at the lake. Sediment removal should be completed by either hand tools or mechanical means where local storm drains discharge to the lake at various locations around the lake perimeter. Access and topography vary by location; therefore, excavation methods would be site-specific to each of the outlet locations. Lake sediment removal at the stormdrain outlet locations is proposed to occur in October before the beginning of the traditional rainy season and in April at the end of the traditional rainy season, and as determined necessary by the park maintenance staff based upon quarterly inspections.

Debris Basin Maintenance

Regular maintenance is required at each lake outlet/inlet. The lake inlets require routine maintenance and repair to maintain and reset the water level at the lake. Sediment removal should be completed by either hand tools or mechanical means where local storm drains discharge to the lake at various locations around the lake perimeter. Access and topography vary by location; therefore, excavation methods would be site-specific to each of the outlet locations. Lake sediment removal at the stormdrain outlet locations is proposed to occur in October before the beginning of the traditional rainy season and in April at the end of the traditional rainy season, and as determined necessary by the park maintenance staff based upon quarterly inspections.

Library Basin. This debris basin is located west of Lake Gregory Drive adjacent to the Crestline Library (the Library Debris Basin). This basin is characterized as a wetland with ponded water from snow melt and urban runoff, vegetation, and sediment. The purpose of maintaining Library basin is to convey stream runoff from Houston Creek into Lake Gregory while ensuring water quality of the lake by capturing sediment and debris before flows enter the lake.

San Moritz Channel Basins. Located at southerly tip of the lake near Houston Creek South outlet to the lake adjacent to San Moritz Lodge and along the bank at the Houston Creek East outlet to the lake. This basin contains sediment with some vegetation. Annual maintenance dredging at San Moritz Lodge Channel Basin is estimated at approximately 2,337 cubic yards. The basin's accessibility and debris trapping efficiency are vital components to the Regional Parks' O&M Manual.

Below are the general functions of the two debris basins:

1. Sediment Control: Debris basins are designed to capture and retain sediment and debris carried by stormwater runoff. In the case of Lake Gregory, these basins help prevent excessive sediment from being washed into the lake. Sediment in the lake can degrade water quality, reduce water storage capacity, and negatively impact aquatic ecosystems.

2. Flood Control: Debris basins are often strategically located in areas prone to flash floods or heavy rainfall. They help reduce the risk of downstream flooding by trapping large debris and slowing down the flow of water. This function is critical for protecting communities and infrastructure downstream from the basin.

3. Erosion Control: By capturing sediment and debris, debris basins help prevent erosion in the surrounding areas. Erosion can lead to soil loss and the transport of pollutants into water bodies, which can harm aquatic life and water quality.

4. Water Quality Improvement: Debris basins aid in improving water quality in Lake Gregory and its tributaries. By intercepting pollutants, such as sediment, trash, and contaminants from urban areas, they prevent these substances from reaching the lake, thereby maintaining better water quality.

5. Reservoir Protection: In the context of Lake Gregory, a debris basin can help protect the lake's storage capacity and recreational quality. Without effective sediment control, the lake can gradually fill with sediment, reducing its depth and impairing its usability for boating, swimming, and other recreational activities.

Lake Dredging

Significant Lake dredging would not be required as a part of regular and normal lake maintenance activities. Dredging would only be conducted when sufficient sediment has accumulated in the lake to hinder normal lake

operations or reduced the capacity of the lake sufficiently to necessitate removal of the sediment. Dredging should be conducted between Labor Day though Memorial Day outside of the fish spawning season. The following activities should be conducted when lake dredging is deemed necessary by Park management/staff to ensure proper functioning of the lake. Lake dredging can be accomplished with either a boat mounted dredge or conventional construction equipment such as a wheeled-loader and excavator. The O&M Manual provides Best Management Practices (BMPs) during dredging, stockpiling, dewatering operations. Refer to Appendix I.

General O&M Activities

Maintenance of the lake entails a number of maintenance activities that are limited to the off-season, non-operational period only for health and safety reasons. While some maintenance activities are required to be conducted during the park operational season. The process of keeping the lake aesthetically and functionally optimal consists of a number of operational and maintenance procedures. The recommended lake water surface/operational standards include:

1. Floating Debris - Floating Debris (trash, leaves, fish etc.) should be held to a minimum by daily collection during routine patrol of the lake each working day.

2. Water Clarity - A Secchi Disk reading of two (2) or more feet should be maintained. Should the water turbidity be less than this standard, immediate steps should be taken to determine the cause and corrective action should be taken. Rapid changes in the readings are an indication of developing problems.

3. Dissolved Oxygen - A minimum of five (5) milligrams of oxygen per liter (mg/l) is desirable to protect the fishery and aquatic life in the lake. Should oxygen levels drop below the minimum as indicated by routine monthly monitoring, the cause should be determined, and corrective action initiated.

4. Algae - Some algae growth is essential in maintaining a balanced ecosystem in the lake. Objectionable growths of algae (those that interfere with the intended uses of the lake or cause odors and unsightly conditions) should be identified and controlled by appropriate action.

5. Aquatic Plant Growth - Aquatic plant growth is good for wildlife, the fishery, and the lake ecosystem. However, if aquatic plant growth interferes with any of the intended uses of the lake should be identified and controlled by appropriate action, physical removal and cutting rather than chemical controls.

6. Vector Control - A Lake vector identification and control program should be developed. An effective lake vector control program will control shoreline vectors such as rats, mice, gophers, squirrels, etc. In addition, flying inset vectors such as mosquitoes, midge flies, house flies, hornets, etc. need to be controlled as well. We recommend natural vector control methods through creating and supporting a balanced ecosystem where there is a balance of food sources, predators, and prey at each level of the food chain.

7. Waterfowl Population Control - Excess waterfowl can be devastating to lake water quality. Waterfowl produce more waste per unit body weight than bovine. An effective resident waterfowl population control program should be developed.

8. Water Level Control - The lake water level should be maintained within normal limits to preserve the shoreline conditions.

9. Rule Enforcement and Lake Patrol - All rules and regulations pertaining to the use of the lake and maintenance of the lake's quality should be enforced by routine patrol of the lake by authorized personnel. Violations of rules should be entered in a Lake Log and reported to the Lake Manager for action.

10. Log - A Lake log should be maintained by the lake management staff. The objective of a log is to establish a chronological record of all pertinent data relative to lake quality and rule violations, such as, but not limited to water clarity, plant growth, water level, water temperature, oxygen content, insect infestations, waterfowl population growth, rule infractions, trespass, and equipment malfunctions.

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT

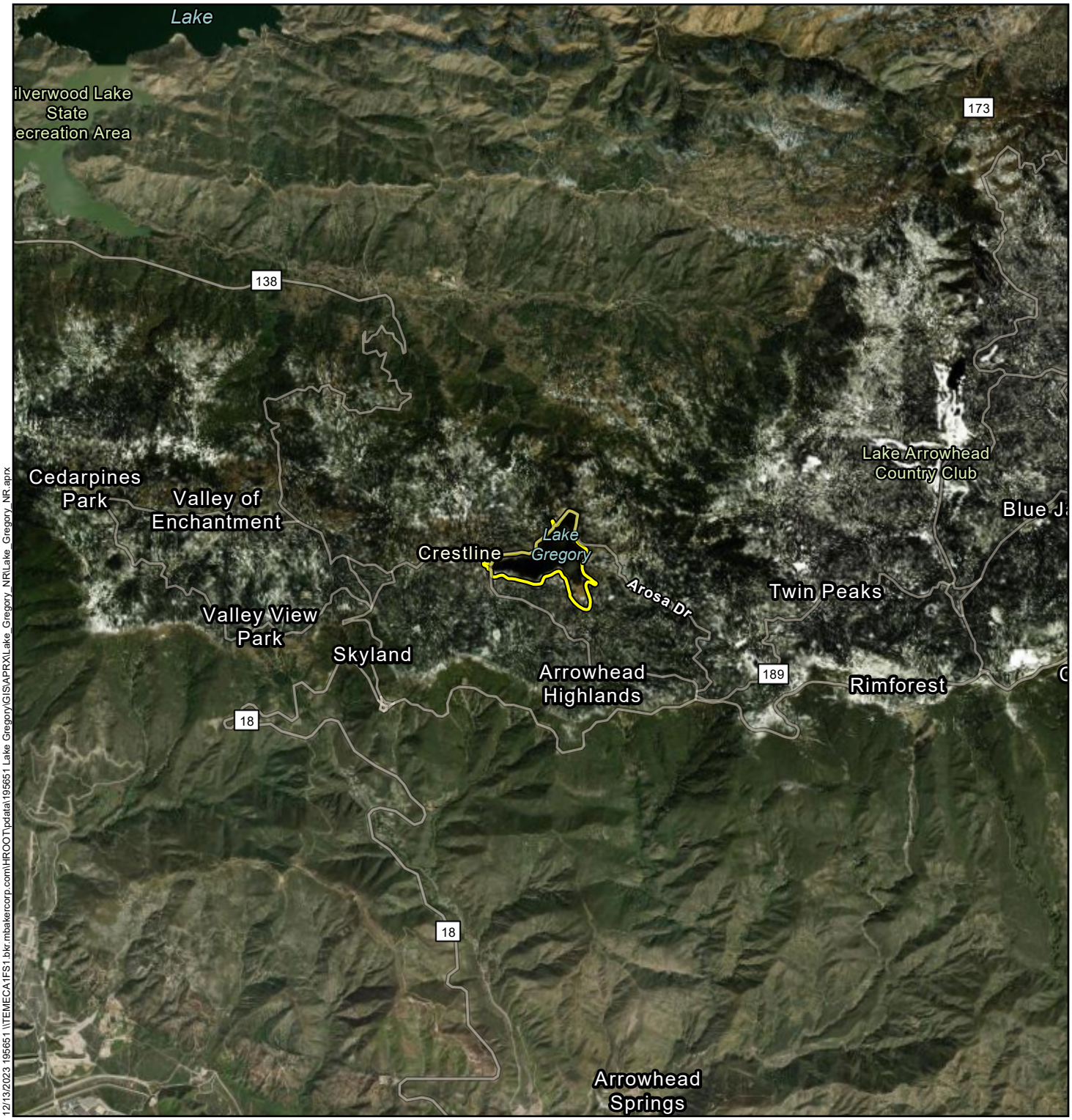
Michael Baker INTERNATIONAL

Source: ArcGIS Online, 2018

Regional Vicinity

Figure 1

12/13/2023 195651 \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx



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Legend

Project Site

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT

Michael Baker INTERNATIONAL

0 0.5 1 Miles

Source: Esri World Imagery Hybrid 2023

Project Vicinity

Figure 2

12/13/2023 195651 \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

Project Site

Reference Point

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT

Project Site

Figure 3

INLET IDENTIFICATION NOTES

001 EXIST DOUBLE 24" CMP INLETS - WITH PROP HEADWALL AND RIPRAP PAD

002 EXIST 36" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

003 EXIST 24" CMP INLET

004 EXIST 36" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

005 EXIST 24" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

006 EXIST 12" PVC & 36"HDPE INLETS - WITH PROP HEADWALL AND RIPRAP PAD

007 EXIST 24" HDPE INLET

008 EXIST 24" CMP INLET - WITH PROP 30 LF 18" RCP, CONC COLLAR, HEADWALL AND RIPRAP PAD

009 EXIST18" CMP, 24" CMP, 24" CPP & 12" PVC (BLUE) INLETS - WITH PROP HEADWALL AND RIPRAP PADS

010 EXIST 24" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

011 EXIST 32" CMP & 48" CMP INLETS

012 EXIST 24" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

013 EXIST 36" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

014 EXIST 24" CPP INLET - WITH PROP 55 LF 24" RCP, CONC COLLAR, HEADWALL AND RIPRAP PAD

015 EXIST 15" SOLID METAL PIPE INLET

016 EXIST 12" PVC INLET (BLUE)

017 EXIST 18" CMP INLET

018 EXIST 24" CMP INLET

019 EXIST 24" CMP INLET WITH EXIST 27' DEEP WATER GAUGE

020 EXIST 24" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

021 EXIST 24" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

022 EXIST 16" CMP INLET - WITH PROP HEADWALL AND RIPRAP PAD

023 EXIST 24" CMP INLET

024 EXIST 12" PVC - WITH PROP HEADWALL AND RIPRAP PAD

026 EXIST 24" CMP INLET (TO BE FIELD VERIFIED)

027 EXIST 24" CMP INLET (TO BE FIELD VERIFIED)

028 EXIST 18" CMP INLET

029 EXIST 24" CMP INLET

030 EXIST 12" WAPER PIPE

031 EXIST 18" CMP INLET

032 EXIST 18" CMP INLET

033 EXIST TRIPLE 60" RCP INLETS

\\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\3.0 Work\CEQA\Exhibits

Michael Baker INTERNATIONAL

NOT TO SCALE

Source: J. Smith & T. Muli, September 8, 2023.

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT

Inlet Map

Figure 4

SECTION 4 - ENVIRONMENTAL CHECKLIST FORM

1.	**Project Title:**	Lake Gregory Regional Park Sitewide Sediment Management Project
2.	**Lead Agency Name**	County of San Bernardino Department of Public Works, Special Districts
	and Address:	825 East Third Street San Bernardino, California 92415-0835
3.	**Contact Person:**	Jon Aldana, Senior Project Manager / Phone: (909) 386-8801
4.	**Project Location:**	Lake Gregory is located in the unincorporated community of Crestline Forest in San Bernardino County The site is addressed 24171 Lake Drive. Assessor's Parcel Numbers: 033-720-207, 033-730-119, 034-003-201, 034-003-204, 033-720-209, 034-003-202, and 033-720-213. The site is approximately 72 miles east of the city of Los Angeles and 14 miles north of the city of San Bernardino.
	Topographic Quad (USGS 7.5"):	San Bernardino North, California
	Topographic Quad Coordinates:	Township 2 North, Range 4 West, Section 23, San Bernardino North quadrangle, 7.5 Minute Series topographic map.
	Site Access:	Lake Gregory West Beach and South Beach and Swim Park areas
5.	**General Plan/ Zoning Designation:**	Land Use: Open Space (OS) / Zoning: Crest Forest/Floodway (CF/FW)

6. Project Description Summary:

The purpose of the Lake Gregory Regional Park Sitewide Sediment Management Project is to address the current deterioration of the existing Lake Gregory public beach along the lake's swim area, reduce sediment loading in the lake, and to continue the routine operations and maintenance elements at the lake.

Refer to Section 3 for a complete description.

7. Environmental/Existing Site Conditions:

Lake Gregory Regional Park is a man-made lake located in the unincorporated community of Crestline in the San Bernardino Mountains. The lake has been in operation since 1938 with the construction of the completion of an earthen dam ("Lake Gregory Dam"). The lake has an approximate 84-acre surface area. The lake and surrounding shoreline are considered highly

disturbed and in an urbanized/developed setting. The landscape surrounding and adjacent to the lake consist of both native and non-native vegetation types.

8. Surrounding Land Uses/Setting:

Lake Gregory is surrounded by residential and commercial development. The most prominent land use designation is Single Family Residential with a minimum lot size of 14,000 square feet (RS-14M). The second most prominent land use designation within the plan area is Rural Living with a minimum lot size of five acres (RL-5). Most of the commercial land use districts are primarily concentrated near Lake Gregory in the Crestline community, zoned General Commercial (CG).

The Crest Forest plan area also contains Resource Conservation (RC), Special Development Residential (SD-RES), Multiple Residential (RM), Office Commercial (CO), Neighborhood Commercial (CN), General Commercial (CG), Service Commercial (CS), Community Industrial (CI), Institutional (IN) and Floodway (FW) land use districts.

9. Public Agency Approvals or Permits:

Federal:

- U.S. Army Corps of Engineers (USACE)

State:

- Lahontan Regional Water Quality Control Board, Region 6 (RWQCB)
- California Department of Fish and Wildlife (CDFW)

County:

- Approval of the Operations and Maintenance Plan
- Environmental compliance (CEQA)

Financing Approval or Participation Agreements: (i.e. Federal Funding? Grant Funding? JPA Agreements?:

- Yes, compliance with the American Rescue Plan Act

10. Have California Native American tribes traditionally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation?

On _March 20, 2024, the County sent project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code:

- The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN)
- Twentynine Palms Band of Mission Indians

Each recipient was provided a brief description of the proposed project a map of its location, the lead agency contact information, and a notification that the tribe had 30 days to request consultation. The 30-day response period concluded on April 21, 2024.

As a result of the initial notification letters, the YSMN requested consultation and upon conclusion of the consultation requested mitigation measures be applied to the project. With the application of the requested measures, impacts to Tribal Cultural Resources would be non-significant. No response was received from the Twentynine Palms Band of Mission Indians and the Lead Agency deemed the opportunity to consult period closed on April 22, 2024.

11. Lead Agency Discretionary Actions:

The County has the discretion to approve or not approve the proposed action at Lake Gregory.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact area requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☐	Geology and Soils	☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials
☒	Hydrology and Water Quality	☐	Land Use and Planning	☐	Mineral Resources
☐	Noise	☐	Population and Housing	☐	Public Services
☐	Recreation	☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities and Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

LEAD AGENCY DETERMINATION

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: Byanka Velasco, Division Manager

Date: 5/23/2024

1. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

(Check ☑ if project is located within a view-shed of any Scenic Route listed in the General Plan):

Environmental Setting

Lake Gregory is located within the Crest Forest Community. The Crest Forest Community Plan, adopted March 13, 2007, defines this area as approximately 18 square miles of unincorporated area located west of Lake Arrowhead and south of Lake Silverwood, and includes the communities of Crestline, Cedar Pines Park, Valley of Enchantment, and the Lake Gregory Village area. The Crest Forest Community Plan identifies the mountain character of the community as defined by the natural vegetation, natural topography, open space, and the predominance of low-density residential development. The goal of the Crest Forest Community Plan is to protect and preserve the mountain character of the area, maintain low-density residential and commercial development, and meet the needs of the residents and visitors. The scenic area around Lake Gregory is characterized by a small-town mountain community. Scenic vistas surrounding Lake Gregory include Lake Drive to the north and northeast, Lake Gregory Drive to the West, and San Moritz Drive to the south and southeast.

Scenic Routes and Highways

Scenic highways play an important role in the preservation and protection of environmental assets, and places restrictions on development, including grading, landscaping characteristics, and vegetation removal. Eleven roadways located within the plan area designated as scenic routes by San Bernardino County as identified in the Crest Forest Community Plan area, including Lake Drive, Lake Gregory Road, and San Moritz Road. San Bernardino County Policy Plan, Natural Resources, Map NR-4 Scenic Routes and Highways, dated 10/27/20**.** These scenic roads surround the perimeter of Lake Gregory providing access to visitors and residents and provide full view of the lake and its mountain scenery.

Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

No Impact. County of San Bernardino General Plan, Section VI – Open Space Element (2007), Goal OS5, Policy 5.1, identifies criteria scenic resources as a roadway, vista point, or area that provides a view of undisturbed natural areas, includes a unique or unusual feature which comprises an important or dominant

portion of the viewshed, or offers a distant view which provides relief from less attractive views of nearby features such as mountain backdrops behind urban areas. Goal OS 5.3 recognizes the County desires to retain the scenic character of visually important roadways. The scenic routes listed in the General Plan Mountain Region surrounding the project site (Lake Gregory), include Lake Gregory Drive, San Moritz Drive, and Lake Drive from Knapps Cutoff northeast to Dart Canyon Road.

The project would not impact scenic views at Lake Gregory Drive, San Moritz Drive, and Lake Drive because the project does not include construction of new structures or improvements that would obstruct viewsheds of the mountain backdrops. The proposed construction improvements to the Swim Beach consist of construction of a permanent in-water barrier, improvements to the existing lake inlets, and re-construction and enhancement of the San Moritz Channel Basins. These improvements will be scheduled in three phases totaling approximately five months, and the construction improvements will occur in the lake area; therefore, will not obstruct view sheds of the mountain backdrops surrounding the lake. In addition, maintenance activities for the San Moritz Channel Basins will be scheduled during the off season.

The typical construction equipment includes pumps, sweepers/scrubbers, tractors/loaders/backhoes, cement and mortar mixers, graders, and excavators. The ongoing maintenance activities of the sediment basins includes vegetation removal, application of aquatic herbicides, clearing culverts, and maintenance/repair of lake outlet structures as necessary. Maintenance improvements around the lake are necessary to maintain a safe attraction for visitors. Operation and maintenance activities would not result in impacts to scenic vistas and will not obstruct mountain backdrops from Lake Drive at the north and northeast, Lake Gregory Drive to the West, and San Moritz Drive to the south and southeast; therefore, the project would not result in a substantial adverse effect on a scenic vista.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Impact. According to the San Bernardino County Policy Map NR-4, Scenic Routes and Highways, no designated scenic highways are located within the vicinity of the project site. The closest State Scenic Highway, a portion of California State Route 38, is located approximately 37 miles east of the project site.

The construction improvements and ongoing maintenance elements would not substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway because the project activities are confined to the lake area. Further, these improvements will occur at the ground level within and around the perimeter of the lake, and scenic views will not be impacted. Thus, no impacts would occur to scenic resources.

c) *Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less Than Significant Impact. The purpose of the project is to annually restore the lake surface area and bottom elevations to minimize sediment loads entering the lake to maintain the lake's aesthetic, functionality, and quality (physical, biological, and chemical characteristics). Debris and sediment removal, tree and shrub maintenance, and restoration of wetland habitat areas would improve water quality suitable for recreation activities such as fishing and swimming; thereby, improving the physical character of the lake. Equipment staging at a maintenance pad adjoining Library Basin would result in temporary visual impacts. The

equipment and maintenance activities around the lake will temporarily affect the existing visual character or quality of public views. The temporary construction will occur at the South Beach area. Access and topography around the lake's inlets proposes ongoing maintenance varying in location and varying excavation methods specific at each of the inlet locations. The maintenance sediment removal is anticipated to be completed by mechanical means including wheeled and tracked vehicles, when necessary, with equipment located above the lake that would not involve permanent changes to the existing visual character. The equipment access areas will be marked to define the work area and minimize impacts, and outlet repair and maintenance will occur as necessary. These activities will take place during the Park off-season; therefore, the project would not degrade the existing visual character or quality of the site and its surroundings during normal operations when the public is present. The existing public views from adjacent areas will be temporarily affected during the Fall season while maintenance activities are conducted; and therefore, the impact is considered less than significant.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

No Impact. The project does not involve or require new lighting for the construction improvements or for O&M activities. Per the County Noise Ordinance (83.01.080(g)(3)) all construction activities would be limited to occur between 7:00 a.m. and 7:00 p.m., except Sundays and Federal Holidays; all construction activities would be scheduled during daylight hours. No new sources of light or glare would result from implementation of the project; therefore, no impacts are anticipated.

Aesthetics Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

2. AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

(Check ☐ if project is located in the Important Farmlands Overlay): The California Department of Conservation and the County of San Bernardino Natural Resources Element, NR-5 Agricultural Resources does not identify Important Farmlands (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) within the Crestline Area.

Environmental Setting

The project site does not contain important farmland as identified in the Policy Map NR-5 Agricultural Resources. According to the California Department of Conservation (DOC) Important Farmland Finder, the project site is not included in the California Important Farmland. The project is not located on or near Prime Farmland, nor is it under a Williamson Act Contract (DOC 2018).

The Crest Forest Community Plan, Section 5 – Conservation, recognizes preservation and protection of the Crest Forest natural resources including vegetation, wildlife, rock formations, and streambeds. The Crest Community in which Lake Gregory is located, is covered with a diverse biotic community of trees and other vegetation, fish, birds, reptiles, mammals, and other natural resources such as stream lakes. Goals and Policies require preservation of the Crest Forest wildlife, vegetation, and scenic vistas and collaboration with the California Department of Forestry and Fire Warden (CDF), the Natural Resources Conservation District, and the U.S. Forest Service to implement a long-term Forest Heath Restoration and Maintenance program.

Impact Analysis

a) *Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

No Impact. Lake Gregory is located on the San Bernardino County Important Farmland 2012: Sheet 2 of 2 published by the California Department of Conservation Farmland Mapping and Monitoring Program (December 2011). The lake is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the map. There is no existing farmland on the lake and therefore no impacts to farmland would occur.

b) *Conflict with existing zoning for agricultural use or a Williamson Act contract?*

No Impact. The site is zoned Public Facility (PF) surrounded by Open Space (OS), which does not allow for agricultural use. The site does not have land enrolled in a Williamson Act agricultural program (California Department of Conservation, Williamson Act Enrollment Finder, 2023). No impacts would occur.

c) *Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

No Impact. Project activities would occur on County owned land as identified on General Plan Map FH22A. Land Use Zoning Districts as identified in the General Plan include Floodway at the lake, open space on the perimeter parkland, and general commercial at the location of the west existing basin (adjacent to the Public Library). The Open Space land use designation is applied to land that is legally constrained from future development and allows only open space, recreation uses, and similar compatible uses. The project does not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zoned for timberland production.

d) *Result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. The project's construction improvements do no involve conversion or loss of forest land; and therefore, no impact would occur.

e) *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. The project site does not contain Farmland; and, therefore no impact would occur. The current use of the land as a lake is not changing and therefore no impacts would occur.

Agriculture and Forestry Services Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

3. AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

(Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

The project site is located within the South Coast Air Basin (Basin), which is governed by the South Coast Air Quality Management District (SCAQMD). Under CEQA, the SCAQMD is an expert commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Under the Federal Clean Air Act, the SCAQMD has adopted Federal attainment plans for ozone (O_3) and particulate matter 10 microns in diameter or less (PM_{10}). The SCAQMD reviews projects to ensure they do not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any Federal attainment plan. The SCAQMD *CEQA Air Quality Handbook* provides significance thresholds for both construction and operation of projects within the SCAQMD's jurisdiction. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in Table 4, *South Coast Air Quality Management District Emissions Thresholds*, a significant air quality impact may occur, and additional analysis is warranted to fully assess the significance of impacts.

Table 4
South Coast Air Quality Management District Emissions Thresholds

Phase	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction	75	100	550	150	150	55
Operational	55	55	550	150	150	55

Notes: ROG = reactive organic gases; NO_X = nitrous oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns in diameter or less; $PM_{2.5}$ = particulate matter 2.5 microns in diameter or less

Source: South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, April 2019.

Impact Analysis

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant. On December 2, 2022, the SCAQMD Governing Board adopted the *2022 Air Quality Management Plan* (2022 AQMP). The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, and updated emission inventory methodologies for various source categories. Additionally, the 2022 AQMP utilized information and

data from Southern California Association of Governments (SCAG) and its *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS). According to the SCAQMD's *CEQA Air Quality Handbook*, projects must be analyzed for consistency with two main criteria, as discussed below.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

i) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of a project's pollutant emissions relative to localized pollutant concentrations associated with the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) is used as the basis for evaluating project consistency. As discussed under Responses 3(b) and 3(c), the project's short-term construction emissions, long-term operational emissions, and localized concentrations of carbon monoxide (CO), nitrogen oxide (NO_X), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would be less than significant. Due to the role volatile organic compound (VOC) plays in O_3 formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established. Overall, the Project would not result in an increase in the frequency or severity of existing air quality violations.

ii) Would the project cause or contribute to new air quality violations?

As discussed in Response 3(b), the project would result in emissions that are below SCAQMD thresholds. Therefore, the project would not have the potential to cause or affect a violation of the ambient air quality standards and would result in a less than significant impact.

iii) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

The project would result in less than significant impacts with regard to regional and localized concentrations during project construction; refer to Reponses 3(b) and 3(c). Further, the project would not generate operational emissions. As such, the project would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether the project exceeds the assumptions utilized in preparing the forecasts presented in the AQMP. Determining whether a project exceeds the assumptions reflected in the AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

i) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

A project is consistent with the 2022 AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the 2022 AQMP. In the case of the 2022 AQMP, three sources of data form the basis for the projections of air pollutant emissions: the County's General Plan, SCAG's regional growth forecast, and the SCAG's 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS also provides socioeconomic forecast projections of regional population growth.

Based on the County of San Bernardino Policy Plan Land Use Element, Lake Gregory is designated Crest Forest/Floodway (CF/FW). Areas to the west of the lake are designated Crest Forest/General Commercial-Sign Control Primary (CF/CG-SCp), some areas to the north of the lake are designated Crest Forest/Service Commercial (CF/SC), and the remaining areas surrounding the lake are designated Crest Forest/Single Residential - 14,000 square feet Minimum (CF/RS-14M). The project proposes improvements to the Swim Beach, lake inlets, and seasonal operational and maintenance activities at the debris basins and creek outlets into the lake. Therefore, the project would not change the land use type, and the proposed improvements would be consistent with the land use designation and would not require amendments to these local land use planning documents. Furthermore, given the nature of the project, the project would not result in direct or indirect population growth and, therefore, would not affect Countywide plans for population growth at the site. Additionally, the project would require minimal additional operational and maintenance activities compared to existing conditions, and therefore would not increase employment. Thus, the proposed project is consistent with the types, intensity, and patterns of land use envisioned for the site in these local plans. The population, housing, and employment forecasts adopted by SCAG's Regional Council are based on the local plans and policies applicable to the County. As such, the project would be consistent with SCAG's 2020-2045 RTP/SCS. Additionally, as the SCAQMD has incorporated these same projections into the 2022 AQMP, it can be concluded that the proposed project would be consistent with the projections.

ii) Would the project implement all feasible air quality mitigation measures?

The proposed project would result in less than significant air quality impacts. Compliance with all feasible emission reduction measures identified by SCAQMD would be required as identified in Responses 3(b) and 3(c). As such, the proposed project meets this AQMP consistency criterion.

iii) Would the project be consistent with the land use planning strategies set forth in the AQMP?

Land use planning strategies set forth in the 2022 AQMP are primarily based on the 2020-2045 RTP/SCS. As discussed above, the proposed project would be consistent with the County's vision for the site and would not require a General Plan or Zoning Code amendment. As such, the proposed project meets this 2022 AQMP consistency criterion.

In conclusion, the determination of 2022 AQMP consistency is primarily concerned with long-term influence of a project on air quality in the Basin. The proposed project would not result in long-term impact on the region's ability to meet Federal and State air quality standards. Further, the project's long-term influence on air quality in the Basin would also be consistent with the SCAQMD and SCAG's goals and policies and is considered consistent with the 2022 AQMP. Overall, development of the project would not conflict with or obstruct implementation of the 2022 AQMP and impacts would be less than significant in this regard.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant.

Criteria Air Pollutants

Carbon Monoxide. Carbon Monoxide (CO) is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the Basin exhibit large spatial and temporal variations due to variations in the rate at which CO is emitted and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest concentrations frequently occur on weekdays at times consistent with rush hour traffic and late night during the coolest, most stable portion of the day.

Ozone (O_3). Ozone (O_3), a colorless gas with a sharp odor, is a highly reactive form of oxygen. High O_3 concentrations exist naturally in the stratosphere. Some mixing of stratospheric O_3 downward through the troposphere to the earth's surface does occur; however, the extent of O_3 transport is limited. At the earth's surface in sites remote from urban areas, O_3 concentrations are normally very low (e.g., from 0.03 ppm to 0.05 ppm). Unlike most other air pollutants, ozone is not directly emitted, but instead is formed in the atmosphere. Ozone is formed when NOx and VOCs react in the presence of sunlight. While both NO_x and VOCs contribute to ozone, the key to attaining the ozone standard is to reduce NO_x.

Nitrogen Dioxide. Nitrogen Dioxide (NO_2) is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N_2) and oxygen (O_2) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to form NO_2. NO_2 is responsible for the brownish tinge of polluted air. The two gases, NO and NO_2, are referred to collectively as NO_x. In the presence of sunlight, NO_2 reacts to form nitric oxide and an oxygen atom. The oxygen atom can react further to form O_3, via a complex series of chemical reactions involving hydrocarbons. Nitrogen dioxide may also react to form nitric acid (HNO_3) which reacts further to form nitrates, components of $PM_{2.5}$ and PM_{10}.

Sulfur Dioxide (SO_2). Sulfur dioxide (SO_2) is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H_2SO_4), which contributes to acid precipitation, and sulfates, which are components of PM_{10} and $PM_{2.5}$. Most of the SO_2 emitted into the atmosphere is produced by burning sulfur-containing fuels. SO_2 is a precursor to sulfate, which is a component of fine particulate matter, PM_{10}, and $PM_{2.5}$.

Coarse Particulate Matter (PM_{10}). PM_{10} refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate lungs and can potentially damage the respiratory tract. On June 19, 2003, the CARB adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter ($PM_{2.5}$). Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal $PM_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the EPA announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon

appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards.

On January 5, 2005, the EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging. On July 8, 2016, the EPA made a finding that the Basin has attained the 1997 24-hour and annual $PM_{2.5}$ standards based on 2011-2013 data. However, the Basin remains in nonattainment as the EPA has not determined that California has met the FCAA requirements for redesignating the Basin nonattainment area to attainment.

Volatile Organic Compounds (VOCs). VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. The terms VOC and reactive organic gases (ROG) (see below) are often used interchangeably.

Reactive Organic Gases (ROG). Similar to VOCs, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. The terms ROG and VOC are often used interchangeably.

Construction Impacts

Construction Emissions

Construction activities would occur over a period of approximately five months. Construction activities would include temporary inflatable cofferdam installation, dewatering/clearing and grubbing, scarify and dry/dewatering, clearing and grubbing, grading, and storm drain improvements. The project would require hauling of excavated materials from the site to the landfill and hauling of construction materials to the construction areas. The California Emissions Estimator Model (CalEEMod) version 2022.1 was utilized to calculate the Project's construction air pollutants emissions; refer to Appendix B, *Air Quality/Greenhouse Gas Emissions/Energy Data*, for CalEEMod outputs and results. Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of CalEEMod. Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on- or off-site. Table 5, *Project-Generated Construction Emissions*, presents the anticipated daily short-term construction emissions associated with the Project.

Table 5
Project-Generated Construction Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	10.80	89.60	99.60	0.28	8.01	4.26
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Is Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Notes: ROG = reactive organic gas; NO_x = nitrous oxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

1. Emissions were calculated using CalEEMod, version 2022.1. Maximum emissions during summer or winter are presented here to represent the worst-case scenario.
2. Modeling assumptions include compliance with SCAQMD Rule 403 which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.

Refer to Appendix B, *Air Quality/Greenhouse Gas Emissions/Energy Data* for detailed model input/output data.

Fugitive Dust Emissions

Construction activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the project area. Fugitive dust emissions are associated with land clearing, ground excavation, cut-and-fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from grading, excavation and construction is expected to be short-term and would cease upon project completion. These short-term impacts, however, would not be significant for the reasons discussed below.

Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular health concern is the amount of PM_{10} generated as a part of fugitive dust emissions. PM_{10} poses a serious health hazard alone or in combination with other pollutants. $PM_{2.5}$ is mostly produced by mechanical processes. These include automobile tire wear, industrial processes such as cutting and grinding, and re-suspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. $PM_{2.5}$ is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. $PM_{2.5}$ components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations.

The project would implement all required dust control techniques per SCAQMD Rule 403, which requires that excessive fugitive dust emissions be controlled by regular watering or other dust prevention measures to reduce PM_{10} and $PM_{2.5}$ concentrations. It should be noted that these reductions were applied in CalEEMod. As depicted in Table 5, total fugitive dust (PM_{10} and $PM_{2.5}$) emissions during construction would not exceed applicable SCAQMD thresholds. Thus, impacts in this regard would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, employee commutes to the site, emissions produced on-site as equipment is used, and emissions from trucks transporting materials to/from the site. As presented in Table 5, criteria pollutant emissions, including those associated with the use of construction equipment and worker

vehicle exhaust, would not exceed the applicable SCAQMD thresholds. Therefore, impacts in this regard would be less than significant.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, serpentinite and ultramafic rocks are not known to occur within the Project area.[4] Thus, no impact would occur in this regard.

Operational Impacts

The project would continue seasonal operational and maintenance activities during off-season (September to March) to protect the lake, fishery, and recreational resources. These activities include sediment removal at storm drain outlets, culvert pipe repair, and lake sediment removal at outlets. The seasonal operational and maintenance activities are currently conducted following the 2019 Lake Gregory Operations and Maintenance Manual (2019 Manual); however, this project also includes an update the Operational and Maintenance Plan as described in *Section 2, Project Description*. Although the seasonal operational and maintenance activities would generate vehicle trips associated with worker commute and hauling, these trips would be minimal and short-term. Furthermore, the project would generate approximately the same level of maintenance trips as existing conditions. Similarly, stationary source emissions associated with maintenance equipment would also be minimal, short-term, and approximately the same as existing conditions. Additionally, the project does not propose any occupied buildings and would not introduce new stationary source emissions. Overall, as the project would not include new mobile sources of emissions or permanent stationary sources, the project would not have the potential to generate criteria air pollutants emissions from project operations. Impacts would be less than significant in this regard.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age and gender]). In particular, O_3 precursors, VOCs and NO_X, affect air quality on a regional scale. Health effects related to O_3 are therefore the product

[4] California Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report*, August 2000.

of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the project's less than significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

As noted in the Brief of Amicus Curiae by the SCAQMD,[5] the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Further, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD),[6] SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from O_3, as an example, is correlated with the increases in ambient level of O_3 in the air (concentration) that an individual person breathes. SCAQMD's Brief of Amicus Curiae goes on to state that it would take a large amount of additional emissions to cause a modeled increase in ambient O_3 levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's 2012 Air Quality Management Plan, a reduction of 432 tons (864,000 pounds) per day of NO_X and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce O_3 levels at highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NO_X or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. As the project would not exceed SCAQMD thresholds for construction (refer to Table 5) and would not generate operational air emissions, the project would result in less than significant air quality health impacts.

Conclusion

As summarized above, the project's short-term construction emissions would be below the SCAQMD thresholds and would result in a less than significant impact. Furthermore, the project would not result in significant long-term air quality impacts, as there would be minimal additional emissions compared to existing conditions from the operational and maintenance activities. Thus, the project's construction and operational emissions would not contribute to a cumulatively considerable air quality impact for nonattainment criteria pollutants in the Basin. Impacts would be less than significant in this regard.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and

[5] South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

[6] San Joaquin Valley Air Pollution Control District, *Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, 2014.

people with illnesses.[7] Examples of these sensitive receptors are residences, schools, hospitals, daycare centers, and places of worship. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The closest sensitive receptors to the storm drain improvements are a single-family residence (i.e., 24620 Lake Drive) and a school (i.e., Lake Gregory Education Center) located approximately 50 feet from the existing drain outlets. The closest sensitive receptors to the Swim Beach are a single-family residence (i.e., 24101 Lake Gregory Drive) and a library (Crestline Library) located approximately 140 feet west. The closest sensitive receptor to the debris basin is a single-family residence (i.e., 24655 San Moritz Drive) located approximately 200 feet southeast of the debris basin.

In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds (LSTs) for construction and operations impacts (stationary sources only). The CO hotspot analysis following the LST analysis addresses localized mobile source impacts.

LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology*, dated June 2003 and revised 2008, for guidance. The LST methodology assists lead agencies in analyzing localized impacts at the project-specific level. The SCAQMD provides the LST lookup tables for one-, two-, and five-acre projects emitting CO, NO_X, $PM_{2.5}$, or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways.

The SCAQMD guidance on applying CalEEMod to LSTs specifies the number of acres a particular piece of equipment would likely disturb per day.[8] SCAQMD provides LST thresholds for one-, two-, and five-acre site disturbance areas; SCAQMD does not provide LST thresholds for projects over five acres. According to CalEEMod, the project would actively disturb approximately three acres per day during the grading phase. Therefore, conservatively the LST thresholds for two-acre were utilized for the construction LST analysis as the two-acre thresholds are stricter than five-acre thresholds. Sensitive land uses may be potentially affected by air pollutant emissions generated during on-site construction activities. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. According to SCAQMD LST Methodology, projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. As the nearest sensitive uses are located approximately 50 feet (15 meters) from the proposed construction boundary, the LST values for 25 meters (82 feet) were used. The project site is located within Source Receptor Area (SRA) 37, *Central San Bernardino Mountains*.

Construction Impacts

Table 6, *Localized Significance of Emissions*, shows the localized construction-related emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ compared to the LSTs for SRA 37. It is noted that the localized emissions presented in Table 6 are less than those in Table 5 because localized emissions include only on-site emissions (i.e., from construction equipment and dust from material movement), and do not include off-site emissions (i.e., from

[7] Per the definition in the SCAQMD *Final Localized Significance Threshold Methodology*, revised July 2008, and various SCAQMD Rules (such as Rule 1470, paragraph [b][60]).

[8] The number of acres represent the total acres traversed by grading equipment. To properly grade a piece of land, multiple passes with equipment may be required. The disturbance acreage is based on the equipment list and days of the grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday.

hauling activities). As shown in Table 6, localized construction emissions would not exceed the LSTs for SRA 37. Therefore, localized significance impacts from construction would be less than significant.

Table 6
Localized Significance of Emissions

Source	Pollutant Emissions (pounds/day)[1]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions[2,3]	77.21	87.53	4.22	3.20
Localized Significance Threshold[4]	*170*	*972*	*7*	*4*
Thresholds Exceeded?	*No*	*No*	*No*	*No*

Notes: NOx = nitrous oxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter
1. Emissions were calculated using CalEEMod, version 2022.1.
2. Maximum on-site daily emissions for all four pollutants, including NO_X, CO, PM_{10}, and $PM_{2.5}$, occur during the grading phase and storm drain improvement phases overlapping in 2024.
3. Modeling assumptions include compliance with SCAQMD Rule 403 which requires the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.
4. The Localized Significance Threshold Mass Rate Screening Criteria was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction (three acres per day; two-acre thresholds were used) and SRA 37.

Refer to Appendix B, *Air Quality/Greenhouse Gas Emissions/Energy Data* for detailed model input/output data.

Operational Impacts

According to SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed project does not include such uses. Thus, due to the lack of such emissions, no long-term localized significance threshold analysis is needed. No operational LST impacts would result in this regard.

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.).

The Basin is designated as an attainment/maintenance area for the Federal CO standards and an attainment area for State standards. There has been a decline in CO emissions even though vehicle miles traveled on U.S. urban and rural roads have increased. Nationwide estimated anthropogenic CO emissions have decreased 68 percent between 1990 and 2014. In 2014, mobile sources accounted for 82 percent of the nation's total anthropogenic CO emissions.[9] Three major control programs have contributed to the reduced per-vehicle CO emissions: exhaust standards, cleaner burning fuels, and motor vehicle inspection/maintenance programs.

As previously discussed, the proposed project does not directly generate additional vehicle trips compared to existing conditions, a predominant source of CO emissions. As such, it is not anticipated that the project would result in a CO hotspot. Impacts would be less than significant in this regard.

[9] United States Environmental Protection Agency, *Carbon Monoxide Emissions*, https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=10, accessed October 10, 2023.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not propose any uses identified by the SCAQMD as being associated with odors.

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with the California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485, which minimize the idling time of construction equipment either by requiring equipment to be shut off when not in use or limiting idling time to no more than five minutes. Compliance with these existing regulations would further reduce the detectable odors from heavy-duty equipment exhaust. Any odor impacts to existing adjacent land uses would be short-term and negligible. As such, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant in this regard.

Air Quality Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

4. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

☒Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

Environmental Setting

The following section is based upon Appendix C, *Biological Resources Assessment*. The site (Lake Gregory) is mainly comprised of open water, urban/developed lands, with ornamental non-natural habitat types, and disturbed mixed conifer natural vegetation community. The site and surrounding area generally consists of concave flat topography, sloping downwards towards the lake surface. Two natural vegetation communities were observed and mapped within the boundaries of the project site: (1) disturbed mixed conifer forest (*Pinus ponderosa – Calocedrus decurrens)*, and (2) Red Willow Thickets (*Salix laevigata*).

Land cover types observed include beach, non-vegetated channel/floodways, open water, ornamental plantings, and urban/developed lands along the lake perimeter.

Wetland features observed during the field survey include the Library Basin and a portion of Lake Inlet 11 (Refer to *Section 10*, *Hydrology and Water Quality*).

Impact Analysis

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Special Status Plant Species

Less Than Significant With Mitigation Incorporated. No special-status plant species were observed within the project site during 2023 surveys. Thirty-one special-status plant species have the potential to occur due to the presence of coniferous and limited riparian habitat. However, the potential is very low due to current land use and ongoing anthropogenic disturbance in the coniferous forest understory. Regardless, potentially significant direct impacts resulting from construction activities to install improvements associated with the drainage inlets in upland areas could occur to special-status plant species if activities occur in suitable habitat. Potentially significant temporary indirect impacts may occur during construction within or near suitable habitat in the form of dust and increased human activity. Implementation of Mitigation Measure BIO-1 would ensure that impacts to special status plant species remain less than significant.

Special-status plant species with the potential to occur are as follows:

- Parish's oxytheca (*Acanthoscyphus parishii* var. *parishii*)
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*)
- Plummer's mariposa lily (*Calochortus plummerae*)
- San Bernardino Mountains owl's-clover (*Castilleja lasiorhyncha*)
- Mojave paintbrush (*Castilleja plagiotoma*)
- Tulare cryptantha (*Cryptantha incana*)
- Mojave tarplant (*Deinandra mohavensis*)
- Johnston's monkeyflower (*Diplacus johnstonii*)
- southern Sierra woolly sunflower (*Eriophyllum lanatum* var. *obovatum*)
- pine green-gentian (*Frasera neglecta*)
- Johnston's bedstraw (*Galium johnstonii*)
- urn-flowered alumroot (*Heuchera caespitosa*)
- Parry's sunflower (*Hulsea vestita* ssp. *parryi*)
- Silver-haired ivesia (*Ivesia argyrocoma* var. *argyrocoma*)
- ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*)
- lemon lily (*Lilium parryi*)
- Mojave monardella (*Monardella exilis*)
- Hall's monardella (*Monardella macrantha* ssp. *hallii*)
- rock monardella (*Monardella saxicola*)
- California muhly (*Muhlenbergia californica*)
- golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*)
- Parish's yampah (*Perideridia parishii* ssp. *parishii*)
- Transverse Range phacelia (*Phacelia exilis*)
- Mojave phacelia (*Phacelia mohavensis*)
- southern mountains skullcap (*Scutellaria bolanderi* ssp. *austromontana*)
- salt spring checkerbloom (*Sidalcea neomexicana*)
- chickweed oxytheca (*Sidotheca caryophylloides*)
- Laguna Mountains jewelflower (*Streptanthus bernardinus*)
- southern jewelflower (*Streptanthus campestris*)
- San Bernardino aster (*Symphyotrichum defoliatum*)
- Greata's aster (*Symphyotrichum greatae*)

Special Status Wildlife Species

Less Than Significant With Mitigation Incorporated. Five special-status wildlife species have a moderate to high potential to occur within the project site: mastiff bat (*Eumops perotis californicus*), San Bernardino flying squirrel (*Glaucomys oregonensis californicus*), bald eagle (*Haliaetus leucocephalus*), osprey (*Pandion haliaetus*), and yellow warbler *(Setophaga petechia*). The project is not expected to have any permanent impacts to these species. Indirect temporary impacts due to the partial dewatering of Lake Gregory will decrease the amount of foraging habitat for western mastiff bat, bald eagle, and osprey. This temporary indirect impact is expected to be less than significant due to the large size of the lake in comparison with the small proposed dewatered area at Swim Beach. Indirect temporary impacts may occur to nesting birds due to increased noise levels during construction and dredging activities and are considered potentially significant. Implementation of Mitigation Measure BIO-2 would ensure that impacts to special status wildlife species remain less than significant.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Less Than Significant. The project site contains approximately 0.58 acre of red willow thicket, a riparian habitat and sensitive natural community. Implementation of the project would not have permanent impacts to this community. However, approximately 0.07 acre of this community will be temporarily impacted in the southeast portion of the project site associated with the dredging of San Moritz Channel Basins. Due to the size of the impacted area and the temporary nature of the impact, the project would not have a substantial effect on a riparian habitat or other sensitive community, and impacts would be less than significant.

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. The *Aquatic Resources Delineation Report* (Appendix D) determined that approximately 0.53 acre of wetland USACE Waters of the US and RWQCB wetland Waters of the State occur within the project site. The 0.53 acre consists of Library Basin in the western portion of the project site (0.41 acre) and Inlet 11 in the eastern portion of the project site (0.12 acre). Implementation of the project will not temporarily or permanently impact these areas, as a result the project is required to apply for regulatory permits. No impacts to state or federally protected wetlands would occur.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Less Than Significant With Mitigation Incorporated. Wildlife movement is not anticipated within the site, as the project site is surrounded by residential development. Project activities are not anticipated to affect wildlife movement. It is likely, however, that Lake Gregory and the surrounding habitat functions as a migratory stopover for bird species. Indirect temporary impacts have the potential to occur to nesting birds due to increased noise levels during construction and dredging activities. Implementation of Mitigation Measure BIO-2 would ensure that impacts to native wildlife nursery sites remain less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The project site supports trees that are regulated under the San Bernardino County Development Code, Chapter 88.01, *Plant Protection and Management*. The project would not remove any regulated trees. As such, the project will not conflict with any local policies or ordinances protecting biological resources, and no impacts would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is not within or subject to the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the project would have no impact on an adopted conservation plan.

Mitigation Measures

BIO-1 **Pre-Construction Survey for special-status plant species.** Prior to project implementation, a pre-construction survey will be conducted within the appropriate blooming period(s) to ensure no special status plant species are present or will be impacted within the proposed impact area. If no special-status plant species are found during the pre-construction survey, no further mitigation is required and there will be no impact to special-status plant species. If populations of special-status plants are found during the pre-construction survey and they are located within temporary impact areas, a habitat restoration plan will be prepared to minimize impacts to a less than significant level. If populations of special-status plants are found within permanent impact areas, off-site mitigation will be necessary in consultation with CDFW to reduce impacts to less than significant.

BIO-2 **Nesting bird surveys.** Prior to commencing project activities (including construction of improvements and future maintenance) during the nesting season (December 15-September 15), a designated qualified biologist shall survey the project site and a biologically defensible buffer distance for both diurnal and nocturnal nesting birds. Surveys shall be conducted by the designated qualified biologist at the appropriate time(s) of day, no more than three business days prior to commencement of project activities. If an active bird nest is located, the designated qualified biologist shall implement and monitor specific avoidance and minimization measures as specified in a CDFW-approved Nesting Bird Plan. The NBP includes project specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with all applicable laws related to nesting birds and birds of prey. The NBP also includes monitoring protocols; survey timing and duration; the creation, maintenance, and submittal of a bird nesting log to CDFW; and project-specific avoidance and minimization measures. Avoidance measures include project phasing and timing, monitoring of project-related noise, sound walls, and buffers.

Biological Resources Impact Conclusions

Compliance with the mitigation measures above would ensure that impacts remain less than significant.

5. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

(Check if project is located in the Cultural ☐ overlays or cite results of cultural resource review)

Environmental Setting

A *Cultural Resources Assessment* (Appendix E), prepared by BRC Consulting LLC, included a historical records search and field survey. The records search, conducted on July 6, 2023 at the South Central Coastal Information Center (SCCIC), reviewed the status of all recorded historic and prehistoric cultural resources within one half-mile of the project site and survey and excavation reports completed within or adjacent to the project site. Additional resources reviewed included the National Register, the California Register, and documents and inventories published by the California Office of Historic Preservation (OHP). Additional research included the review of records of the General Land Office Maintained by the Bureau of Land Management, the Rim of the World Historical Society, the San Bernardino County Library, the San Bernardino County Assessor, and various Internet resources. Furthermore, a field survey was conducted on November 30, 2023, and December 1, 2023.

The records search revealed that 16 previous cultural resources studies have taken place within or adjacent to the project site, and six cultural resources have been recorded within one half-mile of the project site. A previous search included a portion of the site; however, no cultural resources have been previously reported in the boundaries of the project site.

Impact Analysis

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. The results of the SCCIC research determined that the project site does not contain any known historical resources as defined by the CEQA Guidelines. Therefore, there would be no impact to any historical resources from the proposed project.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant With Mitigation Incorporated. Data from the SCCIC revealed that six cultural resources have been recorded within one half-mile of the project site. Previous disturbances at the project site have been severe and did not yield archaeological resources. As such, the potential to unearth such resources during Project-related excavation is low. However, ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. In the event that excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. With the implementation of Mitigation Measures CR-1 -3, potential impacts to unanticipated cultural resources found during project construction would be less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant with Mitigation Incorporated. No known human remains are present within the project area. If human remains are inadvertently uncovered during project activities, adherence to Mitigation Measure CR-4 would reduce impacts to less than significant.

Mitigation Measures:

CR-1 **Unanticipated Discovery – Cultural Resources.** In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CR-2 **Cultural Monitoring and Treatment Plan**. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CR-3 **Paleontological Monitoring Program**. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are identified, a paleontological monitoring program shall be considered for the remainder of the Project activities. Any proposed program shall follow the current guidelines set forth by the San Bernardino County Museum.

CR-4 **Human Remains.** If human remains or funerary objects are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately, and within 24-hours. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

Cultural Resources Impact Conclusions

Compliance with the mitigation measures above would ensure that impacts remain less than significant.

6. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Environmental Setting

State

Senate Bill 100

Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. SB 100 requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), State board, and all other State agencies incorporate this policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and State board to utilize programs authorized under existing statutes to achieve such renewable energy goals.

Executive Order N-79-20

Executive Order N-79-20 issued September 23, 2022, directs the State to require all new cars and passenger trucks sold in the State to be zero-emission vehicles by 2035. Executive N-79-20 further states that all medium- and heavy-duty vehicles sold in the State will be zero-emission by 2045.

Impact Analysis

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?*

Less Than Significant. The project proposes storm drain improvements, dewatering/clearing and grubbing, grading, and routine O&M elements; the project does not propose any buildings and would not introduce land uses which would require new permanent energy usage. Additionally, while the proposed improvements would provide a safer attraction for park visitors, the proposed project would not generate additional trips compared with existing condition nor is it anticipated to significantly increase the capacity of Lake Gregory. As a result, project operations would not result in increased energy consumption from electricity, natural gas, or operational fuel usage. As such, this analysis focuses on one source of energy that is relevant to the proposed project: on-road (automotive) fuel consumption associated with construction vehicle trips and off-road fuel consumption associated with construction equipment usage.

The California Emissions Estimator Model (CalEEMod) version 2022.1 was utilized to calculate the Project's fuel consumption during construction; refer to Appendix B, *Air Quality/Greenhouse Gas Emissions/Energy Data*, for the CalEEMod outputs and results. The project's construction equipment fuel consumption is estimated from the Project's construction equipment, timing/phasing, and hours of duration for construction equipment as modeled in CalEEMod. The Project's construction automotive fuel consumption is estimated using the California Air Resources Board (CARB) Emissions Factor 2021 (EMFAC2021) database, which provides projections for typical daily fuel (i.e., diesel and gasoline) usage in the County, and the Project-generated trips during construction as projected in CalEEMod.

The project's estimated construction-related energy consumption is summarized in Table 7, *Energy Consumption*. As shown in Table 7, the project would increase the off-road vehicle fuel consumption within the County by 0.0269 percent and on-road vehicle fuel consumption by 0.0015 percent during construction.

Table 7
Energy Consumption

Energy Type	Project Annual Energy Consumption[1]	San Bernadino County Annual Energy Consumption[2]	Percentage Increase Countywide[2]
Fuel Consumption			
Construction Off-Road Fuel Consumption	4,934 gallons	18,347,432 gallons	0.0269%
Construction On-Road Fuel Consumption	17,046 gallons	1,130,700,651 gallons	0.0015%

Notes:
1. Project electricity consumptions as modeled in California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model. Project fuel consumption calculated based on CalEEMod results.
2. The project increases in construction off-road and on-road fuel consumption are compared with the projected Countywide off-road fuel consumption and Countywide on-road fuel consumption in 2025 (first year of construction). Countywide off-road construction equipment diesel fuel consumption and on-road fuel consumption are from CARB EMFAC2021.

Refer to Appendix B, *Air Quality/Greenhouse Gas Emissions/Energy Data* for assumptions and methodology used in this analysis.

Project construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during dewatering/clearing and grubbing, grading, and storm drain improvements. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

As indicated in Table 7, the project's off-road fuel consumption and on-road fuel consumption from construction would be approximately 4,934 gallons and 17,046 gallons, respectively. Consequently, the project's off-road construction equipment diesel fuel consumption and on-road construction fuel consumption would increase San Bernadino County's consumption by approximately 0.0269 percent and 0.0015 percent, respectively. As such, project construction would have a minimal effect on the local and regional energy supplies and would not require additional capacity. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less than significant impact would occur in this regard.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant. The County currently does not have a plan pertaining to renewable energy or energy efficiency. The County General Plan contains some goals related to renewable energy; however, the Project would not propose any new buildings that would consume additional energy over existing conditions. As such, as a lake improvements project with minimal construction fuel consumption, the proposed Project is not anticipated to conflict with or obstruct the State plan for renewable energy or energy efficiency. Specifically, as shown in Table 7, the Project's off-road fuel consumption and on-road fuel consumption from construction would increase San Bernadino County's consumption by approximately 0.0269 percent and 0.0015 percent, respectively. In addition, project implementation would not result in increased operational electricity, natural gas, or fuel consumption compared to existing conditions. Further, the project would be required to adhere to all applicable federal, State, and local requirements pertaining to energy efficiency. Therefore, less than significant impacts would occur in this regard.

Energy Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

7. GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury death involving?			X	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

(Check if project is located in the Geologic Hazards ☒ or Paleontological Resources ☐Overlay District):

Environmental Setting

Lake Gregory is situated in the San Bernardino Mountains, about 4,550 feet above mean sea level. The mountains, located north of the Los Angeles Basin and south of the Mojave Desert, are relatively young for their height, formed approximately 11 million years ago as a result of tectonic plate movement within the San Andreas Fault (USGS, 2000). The mountains feature a variety of local streams and natural lakes, as well as constructed channels and artificial reservoirs. A *Geotechnical Investigations Report* (Appendix H) was prepared in August 2023 by Converse Consultants. Through a thorough literature review, field exploration, and laboratory testing, the report offers conclusions regarding the geotechnical conditions of the project site and provides recommendations regarding design and construction of the proposed improvements.

The report found that the soils present within the project site primarily consist of a mixture of sand, silt and gravel with organic material, which have very low expansion potential. Additionally, the report concludes that while the project site is not located in a mapped State of California designated fault zone, it is within a San Bernardino County Earthquake Fault Zone. Furthermore, the project site is located within an area with low to moderate generalized landslide susceptibility and is not located within any areas of generalized or suspected liquefaction

susceptibility, according to the San Bernardino County General Plan Geologic Hazards Overlay Map sheet FH22C.

Impact Analysis

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

   i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

   ii) *Strong seismic ground shaking?*

   iii) *Seismic related ground failure, including liquefaction?*

   iv) *Landslides?*

   Less Than Significant

   i, ii) According to the San Bernardino North Quadrangle California Division of Mines and Geology official map (July 1, 1974), Lake Gregory is not located near any potentially active faults. The *Geotechnical Investigations Report* specifies that the project site is not located within a State of California designated earthquake fault zone, but does occur within a San Bernardino County designated earthquake fault zone. The nearest County recognized fault is the Cleghhorn Fault, located approximately 2.7 miles northeast of the site. However, the *Geotechnical Investigations Report* concludes that due to the dense nature of the underlying bedrock, the risk of surface fault rupture potential is classified as low. Thus, impacts from fault rupture or strong seismic shaking will be less than significant.

   iii) When an earthquake occurs, excess pore pressures may develop, causing soil mass that lacks cohesion to potentially suffer a dramatic reduction of its shear strength. This phenomenon is known as liquefaction. Neither the State of California nor the County of San Bernadino designate the project site as an area for liquefaction risk (CGS, 2007; CSB FH22 C), and potential impacts are therefore less than significant.

   iv) The General Plan Geologic Hazards Overlay Map for Lake Gregory (FH22 C) categorizes landslide hazard potential for the project site as low to moderate. However, there will be no development of habitable facilities that would significantly alter site topography or promote unstable soil conditions. Therefore, impacts are considered less than significant.

b) *Result in substantial soil erosion or the loss of topsoil?*

   Less Than Significant. Given that the project would not significantly alter site topography or perpetuate unstable conditions, soil erosion, or loss of topsoil, and rather reduce sediment loads entering the lake, no significant impacts will occur.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?*

   Less Than Significant. While development of the proposed facilities necessitates some excavation, grading, and land-clearing activity, the General Plan Geological Hazards Overlay Plan does not recognize any liquefaction potential for the project area. Additionally, the project site is not located within a State of California or County of San Bernadino designated landslide hazard zone (CGS, 2007; SBC 2010). Therefore,

the project is not anticipated to occur in unstable conditions that could result in landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts will be less than significant.

d) *Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Less Than Significant. Expansive soil is characterized by its unique fine-ground clay composition and is an integral component of historical lake and floodplain sediment. These soils are subject to swelling and shrinkage that varies with the amount of moisture present in the ground, the extent of which is dependent on both the amount and types of clay comprising the soil. The Natural Resources Conservation Service (NCRS) issues soil ratings based upon a soil sample's potential for shrinkage, with a 'high' rating indicating a likely hazard. According to the Appendix H, *Geotechnical Investigations Report*, (Converse, 2023), there is very low potential for expansive soil to occur, with all samples being assigned an expansion index of 0. Given that the project is not located on any expansive soil, does not propose development of any habitable structures, any impacts from the project to expansive soils will be less than significant.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

No Impact. The project does not include a proposal for habitable development that would warrant connections to a wastewater disposal system or septic tanks, no impacts will occur.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No Impact.

According to the Cultural Resources Report, the presence of any fossil material is unlikely, given the (relatively) modern ages of the geological units underlying Lake Gregory, but caution during development should be observed. Additionally, the Western Science Center, an authority for paleontological resources within San Bernardino County, does not have localities within the project area, nor within a one-mile radius. While Lake Gregory consists of both Holocene and Cretaceous aged sediments, it is improbable that either is associated with fossil material. The Holocene-aged deposits are newer and have low preservation value, whereas units from the Cretaceous period are not considered paleontologically sensitive. Thus, no impacts to unique paleontological resources or geologic features would occur.

Mitigation Measures

No mitigation measures are required.

Geology and Soils Impact Conclusions

No significant adverse impacts have been identified, and no mitigation measures are required.

8. GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Background

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 369.2 million metric tons of carbon dioxide equivalent ($MTCO_2e$) per year.[10] Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The impact of human activities on global climate change is apparent in the observational record. Air trapped by ice has been extracted from core samples taken from polar ice sheets to determine the global atmospheric variation of CO_2, CH_4, and nitrous oxide (N_2O) from before the start of industrialization (approximately 1750), to over 650,000 years ago. For that period, it was found that CO_2 concentrations ranged from 180 to 300 parts per million (ppm). For the period from approximately 1750 to the present, global CO_2 concentrations increased from a pre-industrialization period concentration of 280 to 379 ppm in 2005, with the 2005 value far exceeding the upper end of the pre-industrial period range. As of October 2023, the highest monthly average concentration of CO_2 in the atmosphere was recorded at 425 ppm.[11]

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO_2e)[12] concentration is required to keep global mean warming below 2 degrees Celsius (^oC), which in turn is assumed to be necessary to avoid dangerous climate change.

Regulatory Framework

Federal

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs

[10]California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2020,* https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf, accessed October 18, 2023.
[11]Scripps Institution of Oceanography, *Carbon Dioxide Concentration at Mauna Loa Observatory*, https://scripps.ucsd.edu/programs/keelingcurve/, accessed October 18, 2023.
[12] Carbon Dioxide Equivalent (CO_2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

at 400 to 450 ppm carbon dioxide equivalent (CO_2e)[13] concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

State

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 – 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then the California Air Resources Board (CARB) should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Senate Bill 32. Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030.

CARB Scoping Plan. On December 11, 2008, CARB adopted the Climate Change Scoping Plan (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce GHG emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 million $MTCO_2e$ under a business as usual (BAU)[14] scenario. This is a reduction of 42 million $MTCO_2e$, or almost ten percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

The Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average

[13] Carbon Dioxide Equivalent (CO2e) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

[14] "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions; refer to http://www.arb.ca.gov/cc/inventory/data/bau.htm. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. The measures described in the Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term statewide emission limit will ensure that the State stays on course to meet our long-term goal."

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was finalized in November 2017 and approved on December 14, 2017, and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new Statewide emissions limit of 260 million $MTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

On December 15, 2022, CARB released the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes. The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. The plan would also reduce emissions of short-lived climate pollutants (SLCPs) and would include mechanical CO_2 capture and sequestration actions, as well as emissions and sequestration from natural and working lands and nature-based strategies. Under 2022 Scoping Plan, by 2045, California aims to cut GHG emissions by 85 percent below 1990 levels, reduce smog-forming air pollution by 71 percent, reduce the demand for liquid petroleum by 94 percent compared to current usage, improve health and welfare, and create millions of new jobs. This plan also builds upon current and previous environmental justice efforts to integrate environmental justice directly into the plan, to ensure that all communities can reap the benefits of this transformational plan.

Local

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. On September 3, 2020, the Regional Council of the Southern California Association of Governments (SCAG) formally adopted the *Connect SoCal: 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS). The SCS portion of the 2020-2045 RTP/SCS highlights strategies for the region to reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels). Specially, these strategies are to:

- Focus growth near destinations and mobility options;
- Promote diverse housing choices;
- Leverage technology innovations;
- Support implementation of sustainability policies; and
- Promote a green region.

Furthermore, the 2020-2045 RTP/SCS discusses a variety of land use tools to help achieve the State-mandated reductions in GHG emissions through reduced per capita vehicle miles traveled (VMT). Some of these tools include center focused placemaking, focusing on priority growth areas, job centers, transit priority areas, as well as high quality transit areas and green regions.

County of San Bernardino General Plan. The General Plan Natural Resources Element provides policies and programs for reducing energy consumption and increasing utilization of new energy sources within the County. Specifically, the Natural Resources Element focuses on protecting and preserving natural resources and improving water and air quality. These policies also help reduce GHG emissions. The General Plan Natural Resources Element includes the following goals and policies that are applicable to the proposed project:

Goal NR-1 Air quality that promotes health and wellness of residents in San Bernardino County through improvements in locally-generated emissions.

Policy NR-1.1 Land use. We promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions.

Policy NR-1.7 Greenhouse gas reduction targets. We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law.

County of San Bernardino Regional Greenhouse Gas Reduction Plan. The County of San Bernardino adopted its first Greenhouse Gas Emissions Reduction Plan in 2011 and adopted its current Regional GHG Emissions Reduction Plan Final (GHG Reduction Plan) in March 2021. The GHG Reduction Plan presents a comprehensive set of actions to reduce its internal and external GHG emissions to 40 percent reduction in GHG emissions from 1990 levels by 2030, consistent with the AB 32 Scoping Plan. The GHG Reduction Plan has the following components that fulfill cumulative mitigation for GHG emissions:

- Provides a communitywide GHG emissions reduction target that would substantially lessen the cumulative impact;
- Provides measures that new development projects shall follow to meet the County's reduction target and substantially lessen the cumulative impact;
- Provides a set of GHG emission inventories that provide quantitative facts and analysis for how the measures within the GHG Reduction Plan Update meet the reduction targets that substantially lessen the cumulative impact; and
- Provides an implementation, monitoring, and update program to ensure that the reduction target is met.

GHG Reduction Plan includes measures related to transportation, water, solid waste, energy, and renewable energy sources all play a crucial part in gaining the level of efficiency needed within new development across the County. Mitigation of GHG emissions impacts through the Development Review Process (DRP) provides one of the most substantial reduction strategies for reducing communitywide GHG emissions associated with new development. The DRP procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by utilizing (1) applying a uniform set of performance standards to all development projects, and (2) utilizing the Interim Screening Tables to mitigate project GHG emissions. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. A review standard of 3,000 $MTCO_2e$ per year will be used to identify projects that require the use of the Interim Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions.

Thresholds of Significance

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions and gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7I). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (CEQA Guidelines Section 15064(h)(3)).[15,16] A project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.[17]

As discussed above, the GHG Reduction Plan requires all development projects, including those otherwise determined to be exempt from CEQA, are subject to applicable Development Code provisions, including the GHG performance standards and State requirements. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 $MTCO_2e$ per year are considered to be consistent with the GHG Reduction Plan and determined to have a less than significant individual and cumulative impact for GHG emissions.

Impact Analysis

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant. The project's anticipated GHG emissions are identified in Table 8, *Estimated Greenhouse Gas Emissions*. The most recent version of the California Emissions Estimator Model (CalEEMod), version 2022.1 was used to calculate project-related GHG emissions. Project-related GHG emissions would include direct emissions from construction activities. The project proposes seasonal operational and maintenance activities during off-season (September to March) to protect the lake, fishery, and recreational resources. These activities include sediment removal at storm drain outlets, culvert pipe repair, and lake sediment removal at outlets. The seasonal operational and maintenance activities are currently conducted following the 2019 Lake Gregory Operations and Maintenance Manual (2019 Manual). The project proposes updates to the 2019 Manual to improve the lake maintenance program. Although the

[15] California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, pp. 11-13, 14, 16, December 2009, https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf, accessed October 18, 2023.
[16] State of California Governor's Office of Planning and Research, *Transmittal of the Governor's Office of Planning and Research's Proposed SB97 CEQA Guidelines Amendments to the Natural Resources Agency*, April 13, 2009, https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf, accessed October 18, 2023.
[17] 14 CCR Section 15064(h)(3).

seasonal operational and maintenance activities would generate vehicle trips associated with worker commute and hauling, these trips would be minimal and short-term. Furthermore, the project would generate approximately the same level of maintenance trips as existing conditions. Similarly, stationary source emissions associated with maintenance equipment would also be minimal, short-term, and approximately the same as existing conditions. Additionally, the project does not propose any occupied buildings and would not introduce new stationary source emissions. Overall, as the proposed project would not include new mobile sources of emissions or permanent stationary sources, no GHG emissions associated with project operation (such as those from area sources, refrigerants, energy consumption, water demand, and solid waste generation) are anticipated or quantified.

Table 8
Estimated Greenhouse Gas Emissions

Source	CO_2	CH_4	N_2O	Refrigerants	CO_2e
	Metric Tons/year[1]				
Direct Emissions					
Construction (amortized over 30 years)[2]	31.10	<0.01	<0.01	<0.01	31.63
Total Project-Related Emissions[3]	32 $MTCO_2e$/year				
County of San Bernardino Screening Threshold	3,000 $MTCO_2e$/year				
Exceed Thresholds?	No				

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model.
2. The amount of GHG emissions from project construction would total 31.63 $MTCO_2e$ per year when amortized over 30 years, or 949 $MTCO_2e$ total. The standard 30-year project lifetime assumption is based on South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.
3. Totals may be slightly off due to rounding.

Refer to Appendix B, *Air Quality/Greenhouse Gas Emissions/Energy Data* for assumptions used in this analysis.

Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.[18] As shown in Table 8, the proposed project would result in approximately 32 $MTCO_2e$ per year construction emissions when amortized over 30 years (or a total of 949 $MTCO_2e$ in 30 years). As discussed above, the project would not generate emissions during operation. As such, the amount of project related GHG emissions from direct and indirect sources combined would total approximately 32 $MTCO_2e$ per year. Therefore, project-related GHG emissions would not exceed the County's screening threshold of 3,000 $MTCO_2e$ per year, and impacts would be less than significant.

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Less Than Significant. According to the GHG Reduction Plan, "all development projects, including those otherwise determined to be exempt from CEQA will be subject to applicable Development Code provisions, including the GHG performance standards, and State requirements, such as the California Building Code requirements for energy efficiency. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 $MTCO_2e$ per year will be considered to be consistent with the Plan Update and determined to have a less than significant individual and cumulative impact for GHG emissions." The GHG Reduction Plan also states that "the 3,000 $MTCO_2e$ per year value was chosen as the medial value and is used in defining small projects that must include the Performance

[18] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008).

Standards as described in Attachment B (of the County of San Bernardino Greenhouse Gas Emissions Reduction Plan), but do not need to use the Screening Tables or alternative GHG mitigation analysis described in Attachment D (of the County of San Bernardino Greenhouse Gas Emissions Reduction Plan)."

The project's total GHG emissions would not exceed the County's screening threshold of 3,000 $MTCO_2e$ per year. Therefore, the project does not need to accrue points using the screening tables and is considered consistent with the GHG Reduction Plan.

As an update to the existing 2019 Manual with minimal construction GHG emissions and operational emissions, the proposed project is not anticipated to conflict with or obstruct a State plan for GHG emissions reductions. Specifically, as shown in Table 8, project-related GHG emissions would only result in a total of approximately 32 $MTCO_2e$ per year and are well below the County's 3,000 $MTCO_2e$ per year screening threshold. Comparing to other development projects, the proposed project would generate a nominal amount of GHG emissions and would not have the potential to conflict with the 2022 Scoping Plan or any other applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant in this regard.

Greenhouse Gas Emissions Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

9. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk loss, injury or death involving wildland fires?			X	

Environmental Setting

The site has not been under investigation for violation of any environmental laws, regulations, or standards, as identified in the databases as reported in the *Hazardous Materials Memorandum* (Appendix F). No reported releases of hazardous materials are noted. The Memorandum notes that four (4) adjacent and adjoining facilities present a concern to soil, soil gas, and/or groundwater at the project site: Crestline Sanitation District Office Crestline Station (24516 Lake Drive), Bills ARCO (24157 Lake Drive), Mountain Area Regional Transit Authority and Lee's Automotive (621 Forest Shade), and Seven-11 Store #23818 (24156 Lake Drive).

Impact Analysis

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Less Than Significant. The project involves improvements to two debris/sedimentation basins, construction of headwalls around lake inlets, improvements to the swim beach area, and implementation of an on-going lake maintenance program. Construction and operation of the project would not involve hazardous materials that may result in a significant hazard to the public or to the environment. The placement of silt associated with project O&M activities would be required to comply with existing federal, state, and local laws and regulations pertaining to the placement of fill material. Compliance with these laws and regulations would ensure impacts are less than significant.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Less Than Significant. Refer to Response 9(a) above.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Less Than Significant. Refer to Response 9(a) above.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

No Impact. The project site is not located on a site which is included on the Cortese List as retrieved on November 13, 2023, from the California EPA Cortese List Data Resources. Therefore, the proposed project would not create a significant hazard to the public or environment. No impacts would occur.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

No Impact. The project site is not located within an airport influence area or within an airport compatibility zone as identified in San Bernardino County General Plan Hazards Map FH22 B. No private airstrips occur in the vicinity of the project site. Implementation of the proposed project would not result in a safety hazard related to an airport land use plan or resulting from the use of an airstrip in the immediate project area and no impacts are anticipated.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No Impact. The Crest Forest Community Plan Safety Chapter identifies the evacuation routes for the community in the event of potential fire or other natural disaster events. The following roadways are identified in the plan as designated evacuation routes: SR-138, SR-18, SR-189, Waters Drive, Crest Forest Drive, Knapps Cutoff, Lake Gregory Drive, Arosa Drive, San Moritz Drive, North Road, and Lake Drive. Lake Gregory Drive, Lake Drive, and San Moritz Drive are located in the immediate project vicinity and all provide access to the Lake Gregory Regional Park recreation area. Per the Crest Forest Community Plan, in the event of an emergency, specific evacuation routes would be designated during an emergency in order to respond to the specific needs of the situation and circumstances surrounding the disaster.

The project site is also located within the planning area for the Lake Gregory Dam Emergency Action Plan (EAP). The purpose of the EAP is to reduce risk and loss of human life and injury, and to minimize property damage in the event of an emergency situation associated with the Lake Gregory Dam. Potential emergency situations as identified in the plan may include: dam instability, felt earthquakes, extreme storm events, major spillway releases, overtopping of the dam, outlet system failure, abnormal instrumental readings, vandalism or sabotage, spillway gate failures, or failure of the dam. The plan establishes guidelines that should be followed for identification of emergency situations and action protocols in the event of an emergency. The proposed project would be limited to the identified construction areas. During the construction phase, no activities would infringe on or restrict access to the designated evacuation routes in the Project vicinity. Similarly, operation of the project would be limited to basin maintenance and sediment removal activities that would not result in impacts to adjacent roadways. The project would not impair implementation of or

physically interfere with an adopted emergency response plan or emergency evacuation plan, thus no impacts would occur.

g) *Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Less Than Significant. The project site is located within the Fire Safety Area 1 (FS1) Overlay of the San Bernardino County General Plan Hazards Overlay Map FH22 B. Development within the Fire Safety Overlay Area is guided by Chapter 82.13 of the County Development Code. The purpose of the overlay is to provide greater public safety in areas prone to wildland brush fires, by establishing additional development standards (Development Code Section 82.13.010). The FS1 overlay is characterized by areas with moderate and steep terrain and moderate to heavy fuel loading contributing to high fire hazard conditions. The Development Code requires that a notice of application or permit for development in FS areas be sent to the responsible Fire Authority for comment. Additionally, all development within FS areas must comply with development standards as outlined in Section 82.13.050 and 82.13.060 of the Development Code. Fire Authority Standards include compliance with standards required by the Responsible Fire Authority and compliance with standards and provisions of the California Building Code Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure).

The project site is located within the Crest Forest Fire Protection District. Lake Gregory Regional Park is located within the service area of two of the District's fire stations: 1) Lake Gregory Station #29, and 2) Crestline Station #25. The project's construction improvements and O&M activities would not directly expose people or structures to a significant risk of loss, injury or death in relation to wildland fires, and less than significant impacts would occur.

Hazards and Hazardous Materials Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?				X
i. Result in substantial erosion or siltation on – or off-site;				X
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on – or off-site;				X
iii. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

Environmental Setting

According to the *Aquatic Resources Delineation Report,* (Appendix D), the project site occurs within Lake Gregory, which outlets to Houston Creek, is tributary to Trinity River, and flows into Silverwood Lake. Silverwood Lake outlets into the West Fork Mojave River, which is ultimately tributary to the Mojave River. The report classified Lake Gregory, San Moritz Basin Channel, Lake Inlets, and Aquatic Feature 1, a small channel located along the southern shore of the lake, as USACE non-wetland waters of the United States (WoUS). The report classified the Library Debris Basin and a portion of Inlet 11 as USACE wetland WoUS. Wetland waters of the United States subject to regulation under Section 404 of the Clean Water Act.

Impact Analysis

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

Less Than Significant With Mitigation Incorporated. The project involves the implementation of a dredging plan to enhance the safety of the Swim Beach area, flattening of the beach area, installation of headwalls around lake inlets for sediment control, improvement to two debris basins, and implementation of an on-going lake maintenance program. Proposed project activities would occur in riparian and stream areas identified to be under the jurisdiction of the California Department of Fish and Wildlife (CDFW), the Army Corps of Engineers (USACE), and the Lahontan Regional Water Quality Control Board (RWQCB) as identified within the Aquatic Resources Delineation Report.

Implementation of the project would require a Clean Water Act Section 401 Certification from the Lahontan Regional Water Quality Control Board to ensure that the Project would not violate State water quality standards. Implementation of the project would involve notification and procurement of necessary permits

and authorizations. Notification to the Lahontan RWQCB and coordination for attainment of the necessary CWA 401 Certification would ensure that the proposed project would not violate water quality standards or waste discharge requirements.

Per the requirements of the National Pollutant Discharge Elimination System (NPDES) the project contractor would be responsible for submitting to San Bernardino County, copies of the approved General Construction Permit, including an approved Stormwater Pollution and Prevention Plan (SWPPP). Best Management Practices (BMPs) to be implemented during project construction activities would be outlined in the SWPPP. The implementation of BMPs would ensure that potential impacts to water quality are effectively avoided or minimized. Implementation of Mitigation Measures HWQ-1 through HWQ-4 would further reduce impacts relative to water quality to less than significant.

b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

No Impact. The project involves a dredging plan to enhance the safety of the Swim Beach area and updates to an ongoing lake maintenance program to address sediment issues. The purpose of the project is to provide a safer attraction for the lake's visitors by creating a safe beach slope and water depth, and to enhance water quality by improving existing debris basins and the construction of headwalls at lake inlets to reduce sediment. Implementation of the project would not deplete groundwater supplies or interfere with groundwater recharge; and therefore, no impacts would occur.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?*

i. *Result in substantial erosion or siltation on – or off-site;*

ii. *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;*

iii. *Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or*

No Impact. The project does not propose changes that would substantially alter existing drainage patters on the site, including substantially increase erosion, the rate or amount of surface runoff, or create/contribute to runoff that would exceed the capacity of existing or planned stormwater drainage sites. The project does not propose alteration of the course of a stream or river. As such, no adverse impacts regarding the alteration of drainage patterns would occur.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

No Impact. Seiche or inundation conditions at Lake Gregory have the potential to be triggered by strong winds, severe storm fronts, or earthquakes. The project entails safety improvements, sediment management, and ongoing operations and maintenance. The project does not propose changes that would significantly impact the potential for inundation, seiche, tsunami, or mudflow. No impacts would occur.

Mitigation Measures

HWQ-1: **Storm Water Pollution Prevention Program.** To avoid water quality impacts on Lake Gregory during the proposed sediment removal activities a Storm Water Pollution Prevention Program shall be implemented for sediment removal and stockpiling activities.

The SWPPP must include a list of BMPs to be implanted as part of the project and a visual monitoring program to ensure the effectiveness of the Plan.

HWQ-2: **Turbidity Control.** Excavation methods shall implement the use of a silt fence or terminal berm, as practicable, to reduce impacts to water quality associated with turbidity.

HWQ-3: **Sediment Removal.** Sediment extraction from the lake shall occur only at the designated Project areas. If practicable, sediment removal activities shall be scheduled to occur during the off-season dry months.

HWQ-4: **Berm Barrier.** To minimize water quality impacts associated with disturbance during removal of sediment on the lake's shoreline, the contractor shall create a berm barrier between the lake and sediment stockpile in order to reduce any incidental drainage to the lake.

Hydrology and Water Quality Impact Conclusions

Less than significant adverse impacts are identified or anticipated when in compliance with the mitigation measures.

11. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Environmental Setting

Lake Gregory and the surrounding mountain environment offers recreation opportunities for residents and visitors; however, the community is primarily residential in nature. There is limited commercial development and no industrial development in the immediate vicinity. The most prominent existing land uses around the project site are residential, and the commercial land use districts are concentrated to the west of Lake Gregory.

Impact Analysis

a) *Physically divide an established community?*

No impact. Development in the community of Crestline is guided by the Crest Forest Community Plan, adopted on March 13, 2007. The primary purpose of the Crest Forest Community Plan is to guide the future use and development of land within the plan area in a manner that preserves the character and independent identity of the community.

The Crest Forest Community Plan states that "Lake Gregory is a community asset that contributes to the character and quality of life in their community and that there is a need to enhance recreation facilities to meet the needs of local residents and limited tourists" *(Crest Forest Community Plan, CF1.3.2-Issues and Concerns, pg. 13).* Community priorities identified in the plan include the expansion of recreation opportunities in trail systems and open space areas located both on public and private lands for residents and visitors.

The proposed project is consistent with the Crest Forest Community Plan guidance and includes improvements to and maintenance of existing recreational opportunities at Lake Gregory. Implementation of the proposed project would result in an enhanced Swim Beach area, improved inlet infrastructure, removal of sediment loads (now and in the future) and allow for on-going routine maintenance activities. Therefore, the project would not divide the established community of Crestline.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

No Impact. The project would not conflict with an applicable land use plan, policy, or regulation as established in the County of San Bernardino General Plan and in the Crest Forest Community Plan. The project is consistent with the following policies:

- **Policy CF/OF4.1** Prioritize and create an improvement schedule for Lake Gregory that satisfies the needs of both locals and visitors. The project proposes to update the existing Lake Gregory Operations and Maintenance (O&M) Manual (2019) to incorporate the proposed project improvements, develop a plan for establishing and maintaining the public beach area, and provide

recommendations to improve the lake fishery, lake user/angler access, and lake user safety that would further complement the lake sediment management program and help to limit sediment transported to the lake body; thereby, prioritizing Lake Gregory's maintenance schedule.

- ***Policy CF/OS 4.2*** *Ensure proper maintenance and improvements to Lake Gregory Regional Park.* The project's operation and maintenance activities will be scheduled annually during the Fall months. The project will improve the water quality, clean the lake by removing debris from the basins, remove sediment around the lake, and implement an on-going lake maintenance program; thereby, addressing Crestline Forest residents' concerns specific to the lack of proper maintenance and the need for recreational facility improvements to serve residents and tourist, as identified on the Crest Forest Community Plan.

In addition, the project is consistent with the Crest Forest Community Plan (Land Use Section CF1.3.3 goals and policies) emphasized protection of sensitive resources, the integration of natural vegetation, and open space designed to enhance the natural surroundings and preserve the community character; therefore, there are no environmental impacts due to conflicts with land use plan, policy, or regulation requirements.

Land Use and Planning Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

12. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Environmental Setting

According to the San Bernardino County Natural Resources Element (last updated on October 27, 2020), Lake Gregory is located outside of the San Bernardino Production-Consumption Region; as such, the site is not designated for mineral resources.

Impact Analysis

a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

No Impact. Lake Gregory was formed by the completion of an earthen-type dam on Houston Creek in 1938. The lake has been maintained for recreational purposes since then and the Lake Gregory Regional Park is currently operated by the San Bernardino County Regional Parks Department.

There are no known mineral resources identified in the Crestline Forest Area within the San Bernardino Countywide Policy Plan Mineral Resources Zones (dated October 27, 2020); and therefore, the project would not impact to mineral resources.

b) *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

No Impact. The lake is located outside of the San Bernardino Production-Consumption Region for mineral resources and therefore, no impacts would result to mineral resource recovery.

Mineral Resources Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

13. NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration of groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	

Environmental Setting

Fundamentals of Sound and Environmental Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.

There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level (L_{eq}), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level (L_{dn}). This is a measure of 24-hour noise levels that incorporates a 10 dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical L_{dn} noise levels for light and medium density residential areas range from 55 dBA to 65 dBA. Similarly, Community Noise Equivalent Level (CNEL) is a measure of 24-hour noise levels that incorporates a 5-dBA penalty for sounds occurring between 7:00 p.m. and 10:00 p.m. and a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Regulatory Framework

State

The State Office of Planning and Research (OPR) Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The OPR Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL. Table 9, *Land Use Compatibility for Community Noise Environments*, presents guidelines for determining acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

Table 9
Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 70	NA	70 – 80	80 – 85
Office Buildings, Business Commercial, Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

Notes: NA = Not Applicable; Ldn = Day/Night Average; CNEL = community noise equivalent level; dBA = A-weighted decibels
Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Normally Unacceptable – New Construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable – New construction or development should generally not be undertaken.

Source: State of California Governor's Office of Planning and Research, *General Plan Guidelines*, July 2017.

Local

County of San Bernardino

General Plan Hazard Element

The Hazards Element of the General Plan includes goals and policies aimed at the control and abatement of natural hazards, human-generated hazards, and risks due to climate change. The Hazards Element provides direction to address risks to communities and prioritizes the reduction of hazards and pollution exposure to unincorporated disadvantaged communities. To protect County residents from excessive noise, the Hazards Element contains the following goals related to the project:

Goal HZ-2: Human-generated Hazards. People and the natural environment protected from exposure to hazardous materials, excessive noise, and other human-generated hazards.

Policy HZ-2.8: Proximity to noise generating uses. We limit or restrict new noise sensitive land uses in proximity to the existing conforming noise generating uses and planned industrial areas.

Policy HZ-2.9: Control sound at the source. We prioritize noise mitigation measures that control sound at the source before buffers, soundwalls, and other perimeter measures.

San Bernardino County Code of Ordinances

The County's noise regulation is contained within the *San Bernardino County Code of Ordinances* (Code of Ordinances). The following sections of the Code of Ordinances are applicable to the proposed Project:

24.0706 Special Sound Source Standards.

C. *Power Tools and Equipment*. Except for emergency work, no person shall operate any power tools or equipment between the hours of 10:00 p.m. and 7:00 a.m. such that the power tools or equipment are plainly audible inside an occupied dwelling other than a dwelling in which the power tools or equipment may be located. Sound level measurements may be used, but are not required, to establish a violation of this Subdivision.

D. *Construction Activity*. Except for emergency work, it shall be unlawful for any person to operate or cause to be operated, construction equipment between 7:00 p.m. and 7:00 a.m.

83.01.080 Noise

C. Noise Standards. Refer to Table 10, *San Bernardino Noise Standards for Stationary Noise Sources*.

Table 10
San Bernardino Noise Standards for Stationary Noise Sources

Affected Land Uses	7 a.m. – 10 p.m. L_{eq}	10 p.m. – 7 a.m. L_{eq}
Residential	55 dBA	45 dBA
Professional Services	55 dBA	55 dBA
Other Commercial	60 dBA	60 dBA
Industrial	70 dBA	70 dBA

Source: San Bernardino County, *San Bernardino County California Code of Ordinances, Section 83.01.080 Noise, Table 83-2, Noise Standards for Stationary Noise Sources,* adopted 2007.

G. *Exempt Noise*. The following sources of noise shall be exempt from the regulations of this Section:

3. Temporary construction, maintenance, repair or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

83.01.090 Vibrations

A. *Vibration Standard*. No ground vibration shall be allowed that can be felt without the aid of instruments at or beyond the lot line, nor shall any vibration be allowed which produces a particle velocity greater than or equal to two-tenths inches per second measured at or beyond the lot line.

C. *Exempt Vibrations*. The following sources of vibration shall be exempt from the regulations of this Section.

(2). Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

Existing Conditions

The Project site is a lake located in a mountain area. Noise sources in the project area are typical of a park setting or recreational area and include the visitors talking, equipment running, and vehicular noise along Lake Gregory Drive, Lake Drive, and San Moritz Drive. The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

Noise Measurements

In order to quantify existing ambient noise levels in the vicinity of the project site, Michael Baker International conducted five noise measurements on October 17, 2023. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site. The five, ten-minute measurements were taken between 10:30 a.m. and 12:00 p.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day and relate closely with the noise standards for the project area. Refer to Table 11, *Noise Measurements*.

Table 11
Noise Measurements

Site No.	Location	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)	Time
1	In front of Crestline Branch San Bernardino County Library	61.7	41.3	75.6	10:39 a.m.
2	Across the street from 24539 San Moritz Drive	60.5	34.8	83.4	10:58 a.m.
3	Across the street from 24645 San Moritz Drive	55.2	32.5	76.6	11:15 a.m.
4	Across the street from Lake Gregory Community Center	56.4	33.2	79.9	11:32 a.m.
5	In front of 461 Zermatt Drive	66.0	35.7	85.0	11:50 a.m.

Notes: dBA = A-weighted decibels, L_{eq} = Equivalent Sound Level; L_{min} = Minimum Sound Level; L_{max} = Maximum Sound Level
Source: Michael Baker International, October 17, 2023.

Meteorological conditions were clear sunny skies, cool temperatures (75 degrees Fahrenheit), with light wind speeds (0 to 5 miles per hour), and low humidity. Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for sound level meters. The results of the field measurements are included in Appendix G, *Noise Data*.

Noise Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The closest sensitive receptors to the storm drain improvements are a single-family residence (i.e., 24620 Lake Drive) and a school (i.e., Lake Gregory Education Center) located approximately 50 feet of the existing drain outlets. The closest sensitive receptors to the beach are a single-family residence (i.e., 24101 Lake Gregory Drive) and a library (Crestline Library) located approximately 140 feet west. The closest sensitive receptor to the

debris basin is a single-family residence (i.e., 24655 San Moritz Drive) located approximately 200 feet southeast of the debris basin.

Impact Analysis

a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant With Mitigation Incorporated. It is difficult to specify noise levels that are generally acceptable to everyone; noise that is considered a nuisance to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions.

Short-Term Construction Impacts

The project proposes improvements of the existing Lake Gregory public beach along the lake's swim area, storm drain improvements, and reducing sediment loading in the lake. The construction activities include constructing storm drain outlet headwall, grading at Swim Beach and South Beach, and constructing concrete cutoff wall. The whole process would take place over approximately five months and would include a site preparation phase which include temporary inflatable cofferdam installation, dewatering/clearing and grubbing, scarify and dewatering/clearing and grubbing; the grading phase; and the storm drain improvements phase. During the temporary inflatable cofferdam installation, dewatering/clearing and grubbing, scarify and dry/dewatering, clearing and grubbing phases would use pumps, sweepers/scrubbers, and tractors/loaders/backhoes. The grading phase would use cement and mortar mixers, excavators, graders, off-highway trucks, rollers, rubber-tired loaders, skid steer loaders, sweepers/scrubbers, and tractors/loaders/backhoes. The storm drain improvement phase would use cement and mortar mixers, sweepers/scrubbers, and tractors/loaders/backhoes. Typical noise levels generated by each piece of construction equipment during each phase are shown in Table 12, *Maximum Noise Levels Generated by Typical Construction Equipment*. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Construction noise levels in the project vicinity would fluctuate depending on the particular type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete phases, with each phase requiring different equipment with varying noise characteristics. These phases alter the characteristics of the noise environment generated on the site and in the surrounding community for the duration of the construction activities.

Table 12
Maximum Noise Levels Generated by Typical Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	Phase Name:	Storm drain improvement	Beach grading	Site preparation
		L_{max} at 50 Feet (dBA)	L_{max} at 50 Feet (dBA)	L_{max} at 140 feet (dBA)	L_{max} at 200 feet (dBA)
Backhoe	20	80	80	71	68
Concrete Mixer Truck	40	79	79	70	-
Concrete Pump	20	82	-	73	-
Excavator	40	85	-	76	-
Grader	40	85	-	76	-
Loader	40	80	-	-	68
Pump	50	77	-	-	65
Roller	20	85	-	76	-
Tractor	40	84	84	75	72

Note:
1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source: Federal Highway Administration, Roadway Construction Noise Model (*FHWA-HEP-05-054*), January 2006.

The closest sensitive receptors to the storm drain improvements are a single-family residence and a school located approximately 50 feet of the existing drain outlets. At the distance of 50 feet, construction noise would range from 79 to 84 dBA L_{max}, refer to Table 12. The closest sensitive receptors to the beach grading activities are a single-family residence and a library located approximately 140 feet west. At the distance of 140 feet, construction noise associated with beach grading would range from 70 to 76 dBA L_{max}, refer to Table 12. The closest sensitive receptor to the debris basin is a single-family residence located approximately 200 feet southeast of the debris basin. During the site preparation phase which includes temporary inflatable cofferdam installation, dewatering/clearing and grubbing, scarify and dewatering/clearing and grubbing, the water would be stored at the debris basin. At the distance of 200 feet, construction noise would range from 65 to 72 dBA L_{max}, refer to Table 12. Noise levels depicted in Table 12 represent maximum sound levels (L_{max}), which are the highest individual sound occurring at an individual time period. As shown in Table 12, construction noise levels could range between approximately 65 to 84 dBA L_{max} at nearest sensitive receptors, which would exceed the existing ambient noise level ranging from 55.2 to 66.0 dBA, refer to Table 12. Although sensitive receptors may be exposed to increased noise levels during project construction, construction activities are exempt from the County of San Bernardino noise thresholds as it is a normal part in the urban life and the project would be required to comply with the County of San Bernardino (Section 83.01.080[G][3]) allowable construction hours (between 7:00 a.m. to 7:00 p.m. Monday through Saturday, construction activities are not allowed on Sundays or nationally recognized holidays).

As discussed in Section 4, *Biological Resources,* it is likely that Lake Gregory and the surrounding habitat functions as a migratory stopover for bird species. Indirect temporary noise impacts have the potential to occur to nesting birds due to increased noise levels during construction activities. Implementation of Mitigation Measure BIO-2 would ensure that indirect temporary noise impacts to nesting birds from project construction remain less than significant. Overall, the project would result in less than significant impacts regarding construction noise with implementation of Mitigation Measure BIO-2.

Operations

Upon project construction completion, routine maintenance and inspection visits would occur; however, there would not be any significant increase in vehicular trips to the project area generated by the project compared to existing conditions. Further, on-going operation of the project would not introduce any new noise-generating sources.

Although lake dredging would not be required as a part of regular and normal lake maintenance activities, dredging would be conducted when sufficient sediment has accumulated in the lake to hinder normal lake operations or reduced the capacity of the lake sufficiently to necessitate removal of the sediment. Dredging activities would occur near the Swim Beach area to maintain operation of the public beach area. As discussed in *Section 4*, *Biological Resources* it is likely that Lake Gregory and the surrounding habitat functions as a migratory stopover for bird species. As such, indirect temporary impacts have the potential to occur to nesting birds due to increased noise levels during dredging. Lake dredging can be accomplished with either a boat mounted dredge or conventional construction equipment such as a wheeled-loader and excavator. Excavator clamshell dredge/backfill equipment typically used for dredging produce noise levels of approximately 77 dBA at 50 feet.[19] The closest sensitive receptors to dredging activities are a single-family residence and a library located approximately 140 feet west. At the distance of 140 feet, dredging could expose sensitive receptors to temporary elevated noise levels (68 dBA). However, dredging would occur within the County of San Bernardino (Section 83.01.080[G][3]) allowable construction hours (between 7:00 a.m. to 7:00 p.m. Monday through Saturday, construction activities are not allowed on Sundays or nationally recognized holidays). Additionally, the O&M Manual provides Best Management Practices (BMPs) during dredging, stockpiling, dewatering operations. Further, implementation of Mitigation Measure BIO-2 would ensure that indirect temporary noise impacts to nesting birds from project-related dredging remain less than significant. Therefore, less than significant operational noise impacts would result.

b) Generation of excessive groundborne vibration of groundborne noise levels?

Less Than Significant Impact.

Construction

Project construction activities can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The California Department of Transportation (Caltrans) *Transportation and Construction Vibration Manual* identifies various vibration damage criteria for different building classes. This evaluation uses the Caltrans architectural damage criterion for continuous vibrations at new residential buildings of 0.5 inch-per-second

[19] Epsilon Associates, Inc., *Hudson River PCBs Superfund Site, Phase 1 Final Design Report Attachment J - Noise Impact Assessment, Table 4-1, Reference Sound Level Data – Dredging and Barging Operation*, March 21, 2006.

(inch/second) PPV. The types of construction vibration impacts include human annoyance and building damage.

Typical vibration produced by construction equipment is illustrated in Table 13, *Typical Vibration Levels for Construction Equipment*.

Table 13
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inch/sec)	Approximate peak particle velocity at 140 feet (inch/sec)[1]
Large bulldozer	0.089	0.0134
Small bulldozer	0.003	0.0005

Notes:
(1) Calculated using the following formula:
$PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$
where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance
PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*
D = the distance from the equipment to the receiver

Source: Caltrans, *Transportation and Construction Vibration Guidance Manual*, April 2020.

The project would use equipment with noticeable vibrations during beach grading phase. The nearest structure with sensitive receptors is a library located approximately 140 feet west of the beach. As indicated in Table 13, vibration velocities from typical construction equipment used during project construction would range from 0.0005 to 0.0134 in/sec PPV at 140 feet from the source of activity, which would not exceed the 0.5 in/sec PPV threshold. Furthermore, County of San Bernardino Development Code Section 83.01.090I(2) states that temporary construction is exempt from the regulations of the vibration section if construction activities occur during the hours of 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays. As such, the impacts would be less than significant.

Operational

The proposed project is a lake sediment management project that would not generate additional operational groundborne vibration that does not already exist and felt by surrounding uses. It should be acknowledged that lake dredging would be conducted when sufficient sediment has accumulated in the lake to hinder normal lake operations or reduced the capacity of the lake sufficiently to necessitate removal of the sediment. As discussed above, lake dredging can be accomplished with either a boat mounted dredge or conventional construction equipment such as a wheeled-loader and excavator. Equipment used for dredging do not typically generate extensive vibration levels. Additionally, dredging would occur within the County of San Bernardino (Section 83.01.080[G][3]) allowable construction hours (between 7:00 a.m. to 7:00 p.m. Monday through Saturday, construction activities are not allowed on Sundays or nationally recognized holidays), and the O&M Manual provides BMPs during dredging operations. Further, the proposed project would not involve railroads or substantial heavy truck operations, and therefore would not result in vibration impacts at surrounding uses. Thus, less than significant impact would occur in this regard.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

Less Than Significant. The project site is not located within two miles of an airport or public use airport. The nearest airport the San Bernardino International Airport located approximately nine miles to the south. Additionally, the project site is not located within the vicinity of a private airstrip or related facilities. Therefore,

project implementation would not expose people residing or working in the project area to excessive noise levels associated with aircraft. As such, the impacts would be less than significant.

Mitigation Measures

Refer to Mitigation Measure BIO-2.

Noise Impact Conclusions

Compliance with the mitigation measure above would ensure that impacts remain less than significant.

14. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Environmental Setting

Residential and commercial development exist adjacent to the project site as well as all around the lake. The land use surrounding the lake is primarily residential to the north, east, and south.

Impact Analysis

a) *Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

No Impact. Implementation of the project would involve improvements to the Swim Beach area, installation of headwalls around lake inlets for sediment control, improvement to two debris basins, and implementation of an on-going lake maintenance program. The project would improve recreational features and enhance the lake's water quality. Related construction activities would be short-term and would not provide long-term employment that would require people to move to the area. The Project would not directly or indirectly induce population growth in the area. The proposed project would have no impacts on population or housing in the area.

b) *Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact. There are no homes presently on the site. As such, construction activities would not displace existing people, housing, or structures. The proposed project would have no impacts on existing people or housing in the area.

Population and Housing Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

15. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?				X
ii. Police protection?				X
iii. Schools?				X
iv. Recreation/Parks?			X	
v. Other public facilities?				X

Environmental Setting

Lake Gregory is located within the Crest Forest Fire Protection District's service area of two of the District's fire stations: 1) Lake Gregory Station #29, and 2) Crestline Station #25. The San Bernardino County Public Works Department is responsible for the year-around operation and maintenance of the lake.

Impact Analysis

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Recreation/Parks, Other public facilities?*

Fire Protection: **No Impact.** Construction improvements and routine operation/maintenance of the project is not anticipated to increase the demand for emergency response in the region for the duration of the Project's construction and operation. The project would not create the need for new or expanded fire facilities and/or services. No impacts would occur.

Police Protection: **No Impact.** Construction improvements and routine operation/maintenance of the project is not anticipated to increase the demand for emergency response in the region for the duration of the Project's construction and operation. The project would not create the need for new or expanded police facilities and/or services. No impacts would occur.

Schools: **No Impact.** The project involves improvements and routine operation/maintenance of the lake and would not generate population growth that would result in an increased need for school services or necessitate the construction of new school facilities or alter enrollment. No impacts would occur.

Parks: **Less than Significant Impact.** Construction of the proposed improvements to the Swim Beach area include flattening the beach area to a uniform engineered slope, a maintenance plan to maintain the slope, and a dredging plan to establish and maintain depth control of the 9 to 10-foot safety zone for continued use of the existing floating waterpark apparatus. Construction of the Swim Beach slope and dredging to maintain the safety zone would result in long term beneficial impacts. Beneficial impacts include the improvement of the recreational features, which serve as a venue for day camps, sporting events, training, and education.

Construction of the proposed improvements to the existing debris basins would result in long term beneficial impacts including public safety, sediment control, and improved water quality.

Other Public Facilities: **No Impact.** No existing public service facilities are located at the site or serve it, and the proposed project would not involve the introduction of a temporary or permanent human population into this area. Based on these factors, the proposed project would not result in any long-term impacts to other public facilities. No impacts would occur.

Public Services Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

16. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Environmental Setting

Lake Gregory Regional Park has been in operation since the completion of the Lake Gregory Dam in 1938. Lake Gregory Regional Park offers a variety of recreational opportunities to its patrons including fishing, boating, swimming, picnic facilities, a skate park, a dog park, and walking and fitness trails. Lake Gregory Regional Park welcomes approximately 100,000 tourists each year. Within the regional park, Lake Gregory encompasses 84 surface acres for swimming and water sports. The Swim Beach area is currently a venue for day camps, sporting events, training, and education. The Lake Gregory Water Park operational season is from Memorial Day through Labor Day each year. From Labor Day through Memorial Day the waterpark is closed to the public and is non-operational.

Impact Analysis

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

No impact. The proposed improvements at Lake Gregory would address the deterioration of the existing Swim Beach area, sediment issues, and include ongoing operation and maintenance activities. Implementation of the project would not substantially increase the use of the existing neighborhood and regional parks, other recreational facilities, or lead to a substantial physical deterioration of park facilities. No impacts would occur.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Less Than Significant Impact. The project improvements would continue to foster a safe recreational attraction for park visitors and improve water quality and ecosystem health. Implementation of the project would address the current deterioration of the Swim Beach area and overall lake area. Construction activities of the swim areas would entail the removal of accumulated sediment, largely from storm runoff, and the flattening of the Swim Beach to address safety concerns including large potholes, depressions, and steep slope. A dredging plan has been developed to maintain depth control for continued use of the existing floating waterpark apparatus. Construction of the swim area would result in long term beneficial impacts, including improved safety, water quality, and aesthetics of the lake.

Recreation Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

17. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				X
d) Result in inadequate emergency access?				X

Environmental Setting

Circulation Goal (CF3.2), of the County of San Bernardino Crest Forest Community Plan, is to maintain the mountain character of the community which could be impacted by roads and traffic generated from the region and the community. The roadway network around Lake Gregory is designated County Scenic Route within the NR-3 Scenic Routes and Highways Policy Map. The roadway network around Lake Gregory includes Lake Drive to the north and northeast and Lake Gregory Drive to the west, both designated Mountain Major Highways, and San Moritz Lane to the south and southeast designated Mountain Secondary Highway.

> "Lake Drive is a two-lane mountain major highway that extends eastward from State Route 138 along the northern shore of Lake Gregory before becoming Arosa drive at an intersection with San Moritz Drive just east of the lake.
>
> Lake Gregory Drive is a two-lane mountain major highway that begins at an intersection with Lake Drive just west of Lake Gregory and continues southeasterly before terminating at an intersection with SR-189.
>
> San Moritz Drive is a two-lane mountain secondary highway that originates immediately west of Lake Gregory at an intersection with Lake Gregory Drive and continues along the southern shore until terminating at an intersection with Lake Drive immediately east of the lake." *(Crest Forest Community Plan, CF3.2-Circulation and Infrastructure, pg. 29).*

Impact Analysis

a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

No Impact. The project would not conflict with a program, plan, ordinance, or policy addressing the circulations system because the project's construction improvements are limited to the lake site and the on-going O&M activities do not involve changes to a circulation system; and therefore, no impacts would occur.

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less Than a Significant Impact. The project's construction improvements and maintenance activities are consistent with CEQA Guidelines Section 15064.3 (b) Criteria for analyzing transportation impacts:

(2) Land Use Projects. The project's construction improvements and ongoing maintenance activities will be temporary, and the vehicles exporting the debris material will use the existing transit corridor located around Lake Gregory classified as a Mayor Highway and a Secondary Highway. The temporary maintenance activities are presumed to cause less than significant transportation impacts.

(3) Transportation Projects. The project is not a transportation project.

(4) Qualitative Analysis. The Level of Services conducted in 2004 identified the future Level of Service for the year 2030 and no additional Level of Service impacts are identified with the project's maintenance activities.

(5) Methodology. The lead agency has discretion to choose the most appropriate methodology to evaluate the project's VMT, which was analyzed in the Crest Forest Community Plan in 2004 including projections for the year 2030. (Crest Forest Community Plan, *Table 4: Existing and Future Roadway Operating Conditions*, pg. 31).

The Crest Forest Community Plan Circulation Section CF 3.2 identified roadways operating at acceptable Level of Service (LOS) in 2004. Lake Drive was reported to operate at LOS B, Lake Gregory Drive was reported to operate at LOS B, and San Moritz Drive was reported to operate at LOS A. The future 2030 Operating Conditions for Lake Drive are anticipated to operate at LOS B, Lake Gregory is anticipated to operate at LOS C, and San Moritz Drive is anticipated to operate at LOS A.

Implementation of the project would result in a temporary increase in traffic during maintenance activities exporting dredge/sediment material from temporary stockpiles located at Crestline Library and Camp Switzerland. The project would not result in the creation of new recreational facilities and is not anticipated to generate new park patrons. Therefore, no impacts to the existing roadways that would be defined as significant per the policies of the Crest Forest Community Plan or inconsistent with CEQA Guidelines section 15064.3 (b) are anticipated.

c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact. The project is not proposing geometric design features that increase hazards, such as sharp curbs or dangerous intersections. The site will not have any changes regarding the current transportation network. The project's operations and maintenance activities will require heavy equipment vehicles such as tracked excavators with a minimum reach of 30-feet, wheeled or tracked mini-skid steer, and three axle 10-yard dump truck. Temporary staging for the equipment access areas will be determined to minimize impacts to habitats and operation activities; however, no geometric design features are proposed. Therefore, no impact would occur.

d) *Result in inadequate emergency access?*

No Impact. The project annual maintenance improvements to remove debris from the basin including sediment accumulated from the westerly tip of the lake adjacent to the Crestline Library and sediment accumulation from the southerly tip of the lake near Houston Creek South outlet to reduce siltation entering the lake and on-going maintenance program would not result in changes to internal or external park circulation. Access to the park would not be changed by on-going implementation of the proposed project. No impacts to circulation system or access would occur; therefore, existing emergency access will not be affected.

Transportation Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, lace, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision I of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision I of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Environmental Setting

Lake Gregory is not considered a cultural resource, as defined in the Public Resources Code Section 21074.

CEQA Assembly Bill 52 (AB 52): "Legislature requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015, requiring consultation with California Native American Tribes and consideration of tribal cultural resources in the CEQA process. (*Cultural Resources Assessment, Lake Gregory Regional Park Sediment Management Project by BCR Consulting, 2024*)

AB 52 requires that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCRs), the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes. Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    A. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or
    B. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or
    C. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision I of Section 5024.1. In applying the

criteria set forth in subdivision I of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Summary of AB 52 Consultation

AB52 consultation was concluded on April 22, 2024. The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN, and formerly known as the San Manuel Band of Mission Indians) requested consultation with the County. As a result of AB 52 consultation with the County, the YSMN requested the following five measures be applied to the project to further reduce the potential impact to tribal cultural resources:

CR-1: Unanticipated Discovery – Cultural Resources. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CR-2: Cultural Monitoring and Treatment Plan. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CR-4: Human Remains. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

TCR-1: Unanticipated Discovery – Cultural Resources/Tribal Cultural Resources. The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

TCR-2: Record Sharing. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation. The Lead Agency and/or applicant shall, in good faith, consult with Yuhaaviatam of San Manuel Nation throughout the life of the project.

Impact Analysis

a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

No Impact. The California Register of Historical Resources Code Section 5020 (K) is defined as "Local register of historical resources" and means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution. Lake Gregory is not listed in the California Department of Parks and Recreation as a historical resource, it has not been recognized pursuant to a local ordinance or resolution.

To be eligible for listing in the California Register of Historical Resources, Lake Gregory would have to meet the following criteria:

- Criterion 1: Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- Criterion 2: Associated with the lives of persons important to local, California or national history.
- Criterion 3: Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
- Criterion 4: Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Lake Gregory does not meet the eligibility criteria of historical resources designation and is not listed in the California Department of Parks and Recreation; therefore, ongoing maintenance of Lake Gregory's sediment will not impact historical resources.

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision I of Public Resources Code Section 5024.1?*

Less than Significant Impact with Mitigation Incorporated. Public Resources Code Section 5024.1I states that a resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:

"(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage. (2) Is associated with the lives of persons important in our past. (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.(4) Has yielded, or may be likely to yield, information in prehistory or history."

Lake Gregory is a man-made lake naturally fed by storm runoff and snow melt form the east and west forks of Houston Creek. Although Lake Gregory offers recreational opportunities to residents and visitors, is does not meet the criteria under Section 5024.1I above stated, to be eligible to qualify as a historical resource.

As a result of AB52 consultation, the YSMN provided information stating the project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. Due to the nature and location of the proposed project and given the Tribe's Cultural Resources Management Department's present state of knowledge, the YSMN concluded that they do not have any concerns with the project's implementation, as planned, at this time. YSMN requests that the following language be made a part of the project/permit/plan conditions. These five measures have been incorporated into the IS/MND and are identified as mitigation

measures TCR 1-2 listed below, and mitigation measures CR-1, CR-2, and CR-4 provided in Section 5 Cultural Resources.

Mitigation Measures:

TCR 1: Unanticipated Discovery – Cultural Resources/Tribal Cultural Resources.
The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

TCR 2: Record Sharing
Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Lead Agency for dissemination to Yuhaaviatam of San Manuel Nation. The Lead Agency shall, in good faith, consult with the Yuhaaviatam of San Manuel Nation throughout the life of the project.

Tribal Cultural Resources Conclusions

Potentially significant adverse impacts were identified to Tribal cultural resources, and mitigation measures are required. With the implementation of mitigation measures CR-1, CR-2, CR-3, TRC-1 and TRC-2, impacts to Tribal Cultural Resources would be less than significant.

19. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Environmental Setting

There are existing utility connections within the Project area as follows:

- Water: Crestline Village Water District (CVWD)
- Wastewater: Crestline Sanitation District
- Stormwater Drainage: San Bernardino County Flood Control District
- Electricity: Southern California Edison (SCE)
- Natural Gas: Southern California Gas Company (SoCalGas)
- Telecommunications: (Spectrum)

Impact Analysis

a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

No Impact. Project construction improvements and on-going O&M activities would accommodate the existing use of the lake and would not increase the use or capacity of the lake. The project does not require or result in the relocation or construction of new or expanded utility services, and as such, would not cause significant environmental effects. No impact would occur.

b) *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

No Impact. According to CVWD's 2020 Urban Water Management Plan (UWMP), water supplies are expected to exceed water demand for the next 20 years during normal, dry and multiple dry years. CVWD obtains its water from local wells in a fractured bedrock aquifer. When the well supply cannot meet demands, imported water supplies are purchased from the Crestline-Lake Arrowhead Water Agency (CLAWA), a State Water Project (SWP) Contractor and local retail and wholesale water supplier to the mountain area. All of the water which CLAWA delivers comes from Silverwood Lake, a facility of the SWP. CLAWA has entitlement of up to 5,800 acre-feet (AF) of water annually from the SWP pursuant to its contract with the Department of Water Resources (DWR). In addition, CLAWA supplements its SWP supply by receiving permits in 1990 from the State Water Board to divert up to 566,280 hundred cubic feet (CCF) (or, 1,300 AF) of water annually from Houston Creek, which flows naturally into Silverwood Lake. On average, imported water makes up one-half of CVWD's annual supply. Neither recycled water nor non-potable water will be a part of CVWD's supply because these uses are prohibited by the California Regional Water Quality Control Board – Lahontan Region. CVWD plans to bring two new wells online by 2025, with one additional well every five years thereafter.

The project would not increase demand or production of water over the long term and would not require new connections to CVWD's service area. The amount of water for construction purposes (i.e., removal of accumulated sediments, debris/sediment basin work) is considered less than significant because the project would be conducted within the existing CVWD entitlements to potable water. Based on the limited and short-term demand for potable water during project construction, sufficient water supplies are available to serve the project, as indicated in CVWD's 2020 Urban Water Management Plan (UWMP). No adverse impacts to water supplies would occur.

c) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

No Impact. The proposed project would not develop any housing or human-occupied structures that would require connection to CVWD's wastewater collection system. In addition, the project does not propose physical structures that would require wastewater infrastructure connections. The site has existing wastewater connections and no new connections to CVWD's wastewater collection system would be required. Therefore, CVWD has adequate capacity to serve the project's wastewater demand. No adverse impacts would occur.

d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

No Impact. The project area is currently served by Athens Services, with waste pickup facilitated by Burrtec Waste Industries. The site is located approximately 7.3 miles west of the Heaps Peak Transfer Station. According to the CalRecycle Solid Waste Information System (SWIS)[20], the Heaps Peak Transfer Station has a permitted maximum daily tonnage of 600 tons per day. Beyond the Transfer Station, the nearest landfills are either the Landers Landfill or the Victorville Landfill. The Landers Landfill has a maximum

[20] California Department of Resources Recycling and Recovery, Solid Waste Information System (SWIS) website, https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2690 Accessed October 4, 2023.

permitted capacity of 1,200 tons per day, and a remaining capacity of 11,148,100 cubic yards (CY), with a maximum permitted capacity of 13,983,500 CY. The Victorville Landfill has a maximum permitted capacity of 3,000 tons per day, and a remaining capacity of 81,510,000 CY, with a maximum permitted capacity of 83,200,000 CY. Both landfills permit thousands of tons of waste per day, which is beyond what the expected amount of waste would be generated by the construction of the proposed project improvements. Furthermore, the proposed project is not anticipated to generate any operational waste beyond the existing waste generated by users of the lake. Waste generated by the project is not expected to significantly impact solid waste collection systems. Therefore, no impacts would occur.

e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

No Impact. State, County, and local agencies with regulatory authority related to solid waste include the California Department of Resources Recycling and Recovery (CalRecycle) and San Bernardino County. Regulations specifically applicable to the proposed project include the California Integrated Waste Management Act of 1989 (AB 939).

The Integrated Waste Management Act, which requires every City and County in the State to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, identifies how each jurisdiction will meet the State's mandatory waste diversion goal of 50 percent by and after 2000. The diversion goal was increased to 75 percent by 2020 by SB 341. The County of San Bernardino Solid Waste Management Division (SWMD) is responsible for the operation and management of the solid waste disposal system which consists of 5 regional landfills, 17 MRFS, 8 transfer stations, and 7 construction/demolition and inert debris processing facilities. According to the Countywide Integrated Waste Management Plan, roughly 70 percent of total solid waste was diverted from landfills in 2016. San Bernardino County Development Code Chapter 84.24, Solid Waste/Recyclable Materials Storage, stipulates standards and regulations for the collection and management of solid waste in the County. Compliance with the above-listed regulations would prevent conflict with statues and regulations related to solid waste. Therefore, no impacts would occur.

Utilities and Service Systems Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

20. WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project?				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Environmental Setting

Lake Gregory is surrounded by steep sloping terrain and heavy vegetative fuel loading and is located within a Very High Fire Hazard Severity Zone (VHFHSZ) within a State Responsibility area (SRA), according to the California Department of Forestry and Fire Protection's (CALFIRE) Fire Hazard Severity Zone map for Southwest San Bernardino County, dated November 7, 2007. Since the project site is located within an SRA, CALFIRE would be responsible for wildland fire prevention and protection. Additionally, San Bernardino County General Plan Hazards Overlay Map sheet FH22B specifies that Lake Gregory is within Fire Safety Area 1 (FS1). This designation encompasses mountainous regions and valley foothill areas throughout the County and is characterized by steep terrain with moderate to heavy fuel loading.

Impact Analysis

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The project does not involve the construction of a habitable facility or infrastructure that would interfere with ay adopted emergency response plans because the project is limited to activities at Lake Gregory. Several existing roadways connect to the Lake Gregory Regional Park recreational area are designated as evacuation routes by the Crest Forest Community Plan Safety Chapter, and no alterations are proposed. Therefore, the project would not affect the implementation of an adopted emergency response or evacuation plan, and no impacts are anticipated in this regard.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. According to the San Bernadino County General Plan Hazards Overlay Map FH22 B, the project site is located within Fire Safety Area 1 (FS1). This map is defined by areas with moderate to steep terrain, and the potential to contribute to fire hazard conditions though heavy fuel loading. Since the site has an FS1 designation, any associated development must adhere to specific development standards (Development Code Section 82.13.010) that are designed to maximize public safety in brush fire prone areas. Additionally, the Development Code requires that a notice of application or permit is sent to the responsible

Fire Authority for comment on any proposed development. Compliance with these existing regulatory practices will reduce potential impacts to less than significant.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

No Impact. Refer to Response 20(a) above.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

No Impact. Project activities include the construction of an in-water stabilization wall, flattening of the Swim Beach area to a uniform 12:1 slope, and inlet improvements to remediate erosion damage, ultimately reducing sediment load into the lake . These proposed improvements are intended to mitigate any potential risks associated with downslope or downstream flooding, landslides, or other types of drainage changes. Therefore, no impacts to drainage changes, downslope or downstream flooding, or post-fire slope instability is anticipated.

Wildfire Impact Conclusions

No significant adverse environmental impacts are identified or anticipated, and no mitigation measures are required.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant with Mitigation Incorporated. The project involves construction improvements to the Swim Beach area including South Beach, improvements to lake inlets, and implementation of an on-going lake maintenance program. Additionally, the project facilitates the implementation of on-going sediment management within the lake including San Moritz Channel Basins and Library Basin, as well as regular channel maintenance to alleviate future sediment accumulation. Analysis of the potential environmental impacts indicates potentially significant environmental impacts to Biological Resources, Cultural Resources, and Hydrology/Water Quality. These impacts are limited to construction activities and can be mitigated to less than significant impact through the implementation of MM BIO-1 and 2, MM-CUL 1, 2, and 3, and MM HWQ 1, 2, 3, and 4. Therefore the project will not significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Less Than Significant. There are no impacts associated with the project that are considered cumulatively adverse or unfavorable. The project is not anticipated to generate significant amounts of air pollutants, traffic, or noise. Given that the environmental impacts would occur within previously disturbed areas, cumulative impacts to biological or cultural resources are also not anticipated to be significant. In addition, mitigation

measures are incorporated that would reduce impacts to less than significant level. No significant cumulative adverse impacts are identified.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant. The project would not cause substantial long-term adverse effects on human beings, either directly or indirectly. Construction activities would temporarily increase ambient noise levels for areas surrounding Lake Gregory, while adhering to the County's noise regulations exclude impacts resulting from temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays. Adhering to the County's noise ordinance would ensure temporary impacts from construction would be less than significant. The project would not be used for storing any toxic or hazardous materials nor does its construction and operation involve this use, and therefore, potential impacts to human beings would be less than significant.

SECTION 5 - SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce or avoid potential environmental impacts to less than significant.

BIOLOGICAL RESOURCES

BIO-1: **Pre-Construction Survey**. Prior to project implementation, a pre-construction survey will be conducted within the appropriate blooming period(s) to ensure no special status plant species are present or will be impacted within the proposed impact area. If no special-status plant species are found during the pre-construction survey, no further mitigation is required and there will be no impact to special-status plant species. If populations of special-status plants are found during the pre-construction survey and they are located within temporary impact areas, a habitat restoration plan will be prepared to minimize impacts to a less than significant level. If populations of special-status plants are found within permanent impact areas, off-site mitigation will be necessary in consultation with CDFW to reduce impacts to less than significant.

BIO-2: **Nesting Bird Surveys.** Prior to commencing project activities (including construction of improvements and future maintenance) during the nesting season (December 15-September 15), a designated qualified biologist shall survey the project site and a biologically defensible buffer distance for both diurnal and nocturnal nesting birds. Surveys shall be conducted by the designated qualified biologist at the appropriate time(s) of day, no more than three business days prior to commencement of project activities. If an active bird nest is located, the designated qualified biologist shall implement and monitor specific avoidance and minimization measures as specified in a CDFW-approved Nesting Bird Plan. The NBP includes project specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with all applicable laws related to nesting birds and birds of prey. The NBP also includes monitoring protocols; survey timing and duration; the creation, maintenance, and submittal of a bird nesting log to CDFW; and project-specific avoidance and minimization measures. Avoidance measures include project phasing and timing, monitoring of project-related noise, sound walls, and buffers.

CULTURAL RESOURCES

CR-1: **Unanticipated Discovery – Cultural Resources.** In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CR-2: **Cultural Monitoring and Treatment Plan**. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CR-3: **Paleontological Monitoring Program**. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are identified, a paleontological monitoring program shall be considered for the remainder of the Project activities. Any proposed program shall follow the current guidelines set forth by the San Bernardino County Museum.

CR-4: **Human Remains.** If human remains or funerary objects are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately, and within 24-hours. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

HYDROLOGY AND WATER QUALITY

HWQ-1: **Stormwater Pollution Prevention Program.** To avoid water quality impacts on Lake Gregory during the proposed sediment removal activities a Storm Water Pollution Program shall be implemented for sediment removal and stockpiling activities. The SWPPP must include a list of BMPs to be implanted as part of the project and a visual monitoring program to ensure the effectiveness of the Plan.

HWQ-2: **Turbidity Control.** Excavation methods shall implement the use of a silt fence or terminal berm, as practicable, to reduce impacts to water quality associated with turbidity.

HWQ-3: **Sediment Removal.** Sediment extraction from the lake shall occur only at the designated project areas. If practicable, sediment removal activities shall be scheduled to occur during the off-season dry months.

HWQ-4: **Berm Barrier.** To minimize water quality impacts associated with disturbance during removal of sediment on the lake's shoreline, the contractor shall create a berm barrier between the lake and sediment to be removed in order to reduce any incidental drainage to the lake.

TRIBAL CULTURAL RESOURCES:

TCR-1: **Unanticipated Discovery – Cultural Resources/Tribal Cultural Resources.** The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

TCR-2: **Record Sharing.** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Lead Agency for dissemination to the Yuhaaviatam of San Manuel Nation. The Lead Agency and/or applicant shall, in good faith, consult with Yuhaaviatam of San Manuel Nation throughout the life of the project.

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SECTION 7 - LIST OF PREPARERS

County of San Bernardino

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Haley Walker, Environmental Planner

Emily Edgington, Environmental Planner

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John Parent, Biological Resources

Ryan Phaneuf, Biological Resources

Kristen Bogue, Hazards

David Brunzell, Cultural Resources (BCR Consultants, subconsultant)

Appendix A – Site Plans

SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS
SPECIAL DISTRICTS
REGIONAL PARKS DEPARTMENT
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
24171 LAKE DR, CRESTLINE, CA 92325

SAN BERNARDINO COUNTY
PUBLIC WORKS

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS AND TO THE LATEST EDITION OF THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN A CURRENT AND APPROVED SET OF PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES. .
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ARRANGEMENTS FOR CONSTRUCTION INSPECTION AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE ITSELF WITH THE JOB SITE AND THE LOCATION OF ALL UNDERGROUND FACILITIES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DIG ALERT REQUESTS AND EXPLORATORY EFFORTS NECESSARY TO VERIFY ANY UNDERGROUND OBSTRUCTIONS. THE CONTRACTOR WILL BE UNILATERALLY RESPONSIBLE FOR ANY DAMAGE DONE TO EXISTING UTILITIES THAT ARE SHOWN OR NOT SHOWN ON THESE PLANS.
5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE, COUNTY OR LOCAL PERMITS.
6. CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND ENCROACHMENT PERMIT OR OTHER REQUIRED PERMITS FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS TRANSPORTATION, PRIOR TO ANY WORK WITHIN THE COUNTY RIGHT OF WAY BY CALLING (909) 387-7910.
7. THE CONTRACTOR SHALL NOTIFY ALL SERVING UTILITY COMPANIES 48 HOURS PRIOR WHEN WORK IS TO BE PERFORMED NEAR THEIR FACILITIES BY CALLING 811.
8. CONTRACTOR SHALL ENSURE THAT EASEMENTS HAVE BEEN RECORDED PRIOR TO START OF WORK.
9. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE UNDERSIGNED ENGINEER AND SAN BERNARDINO COUNTY SPECIAL DISTRICTS.
10. THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
11. ALL STATIONING IS BASED ON THE CENTER LINE OF THE STREET.
12. ALL EXCAVATIONS SHALL BE BACKFILLED AT THE END OF EACH WORKING DAY AND ROADS OPEN TO VEHICULAR TRAFFIC UNLESS OTHERWISE APPROVED BY SPECIAL DISTRICTS.
13. ALL WORK SHALL BE CONSTRUCTED ACCORDING TO THE VERTICAL AND HORIZONTAL MEASUREMENTS OF THESE PLANS AND EXISTING DESIGN STANDARDS. ADEQUATE STAKES SHALL BE SET UNDER THE DIRECTION OF A LICENSED SURVEYOR/ENGINEER FOR THE CONSTRUCTOR. ALL CONSTRUCTION SURVEYING SHALL BE PERFORMED IN ACCORDANCE TO THE SURVEYING PROCEDURES OF THE SURVEYOR/ENGINEER OF RECORD. IF THIRD PARTY SUBCONTRACTORS PERFORM THE CONSTRUCTION LAYOUT AND SURVEYING FOR THIS PROJECT WITHOUT THE COORDINATION OF THE SURVEYOR/ENGINEER OR RECORD, THEY HAVE ASSUMED THE POSITION OF SURVEYOR/ENGINEER OF RECORD. THE FINAL CHECK OF THIS DESIGN IS TO BE THE CONSTRUCTION STAKING AS THE DESIGN MEETS THE EXISTING CONTROL AND ELEVATIONS. ALL EXISTING DISCREPANCIES TO THE STANDARD DESIGN CRITERIA SHALL BE BROUGHT TO THE SURVEYOR/ENGINEER OF RECORD'S ATTENTION PRIOR TO PROCEEDING WITH CONSTRUCTION. IF CONSTRUCTION CONTINUES WITHOUT VERIFICATION THE CONSTRUCTOR ASSUMES THE RESPONSIBILITY OF THE CORRECTNESS OF THE INTENDED DESIGN.
14. ALL GRADING SHALL CONFORM TO THE LATEST CALIFORNIA BUILDING CODE (CBC) CHAPTERS 17, 18,APPENDIX-J AND ALL APPLICABLE SECTIONS.
15. A GRADING PERMIT SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF ANY WORK ON THE SITE.
16. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER REGULATORY AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZED IN THIS PLAN.
17. ALL WORK UNDER THIS PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. A SEPARATE CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS MAY BE REQUIRED FOR ANY WORK WITHIN THE COUNTY RIGHT-OF-WAY.
18. APPROVAL OF THESE PLANS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE EFFECTIVE PROPERTYOWNER ' S PERMISSION HAS BEEN OBTAINED AND VALID GRADING PERMIT HAS BEEN ISSUED.
19. THIS PLAN IS FOR GRADING PURPOSES ONLY AND IS NOT TO BE USED FOR THE PURPOSE OF CONSTRUCTING ONSITE OR OFFSITE IMPROVEMENTS. ISSUANCE OF A PERMIT BASED ON THIS PLAN DOES NOT CONSTITUTE APPROVAL OF DRIVEWAY LOCATIONS OR SIZES, PARKING LOT STRUCTURAL SECTIONS OR LAYOUT, ADA RELATED REQUIREMENTS, BUILDING LOCATIONS OR FOUNDATIONS, WALLS, CURBING, OFFSITE DRAINAGE FACILITIES OR OTHER ITEMS NOT RELATED DIRECTLY TO THE BASIC GRADING OPERATION. ONSITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE APPROVED BUILDING PERMIT PLANS. OFFSITE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE TO PLANS APPROVED FOR THIS PURPOSE BY THE PUBLIC WORKS DEPARTMENT.
20. MAXIMUM CUT AND FILL SLOPE = 2: 1 (HORIZONTAL TO VERTICAL) AND MAXIMUM VERTICAL HEIGHT = 30 FEET, UNLESS AN APPROVED GEOTECHNICAL REPORT CAN JUSTIFY A STEEPER AND TALLER SLOPE.
21. NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL.
22. FILL SLOPES SHALL NOT HAVE LESS THAN 90% RELATIVE COMPACTION, OR AS RECOMMENDED ON THE APPROVED GEOTECHNICAL REPORT.
23. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ADEQUATE COMPACTION HAS BEEN ATTAINED ON THE ENTIRE GRADING SITE, INCLUDING FILL AREAS OUTSIDE THE BUILDING PADS AND ON ALL FILL SLOPES.
24. UNLESS OTHERWISE RECOMMENDED IN AN APPROVED GEOTECHNICAL REPORT, OVER-EXCAVATION SHALL BE AT LEAST 24 INCHES MINIMUM BELOW THE BOTTOM OF FOOTINGS OR TO COMPETENT NATIVE SOIL OR BEDROCK MATERIALS, WHICHEVER IS DEEPER, AS APPROVED BY THE PROJECT ' S GEOTECHNICAL ENGINEER OR GEOLOGIST.
25. EARTHWORK VOLUMES: CUT (CY), FILL _ (CY), TOTAL DISTURBED AREA _ (SF)
26. EARTHWORK QUANTITIES ARE SHOWN FOR GRADING PERMIT PURPOSES ONLY, AND SAN BERNARDINO COUNTY IS NOT RESPONSIBLE FOR THEIR ACCURACY.
27. A COPY OF THE GRADING PERMIT AND APPROVED GRADING PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
28. ANY ONSITE RETAINING WALLS SHOWN ON THE GRADING PLANS THAT ARE OVER 4 ' IN HEIGHT, MEASURED FROM TOP OF WALL TO BOTTOM OF FOOTING, ARE FOR REFERENCE ONLY. RETAINING WALLS OVER 4 ' IN HEIGHT ARE NOT CHECKED, PERMITTED, OR INSPECTED PER THE GRADING PERMIT. A SEPARATE RETAINING WALL PERMIT IS REQUIRED FOR ALL RETAINING WALLS OVER 4 ' IN HEIGHT.
29. ANY WALLS, FENCES, STRUCTURES AND/OR APPURTENANCES ADJACENT TO THIS PROJECT ARE TO BE PROTECTED IN PLACE. IF GRADING OPERATIONS DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR AND/OR DEVELOPER IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).

EROSION CONTROL NOTES

1. IN CASE OF EMERGENCY, CALL (RESPONSIBLE PERSON) AT (24-HOUR TELEPHONE).
2. POLLUTION AND EROSION PREVENTION MEASURES, ALSO KNOWN AS BEST MANAGEMENT PRACTICES (BMPS), MUST BE INSTALLED PRIOR TO GRADING. THESE MEASURES, INCLUDING THE PREVENTION OF SEDIMENTATION OR FLOOD DAMAGE, TO OFFSITE PROPERTY SHALL BE ADEQUATE WHETHER OR NOT AN EROSION CONTROL PERMIT IS REQUIRED.
3. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ONSITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
4. EROSION CONTROL DEVICES SHALL BE FUNCTIONING AT ALL TIMES. IN CASE OF FAILURE, RAPID CONSTRUCTION OF EMERGENCY DEVICES SHALL BE IMPLEMENTED.
5. STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
6. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
7. EXCESS OR WASTE CONCRETE MUST BE CONTAINED ONSITE. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ONSITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
8. CONTRACTORS ARE RESPONSIBLE TO ENSURE ALL EROSION CONTROL DEVICES AND BMPS ARE INSTALLED AND FUNCTIONING PROPERLY PER PLAN AND PERMIT(S). PROPER PRECAUTION SHALL BE CONSIDERED WHEN 50% OR GREATER PROBABILITY OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL.
9. TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
10. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
11. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
12. ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
13. ALL STORM WATER CAPTURE DEVICES SHALL BE PROTECTED AT ALL TIMES.

GEOTECHNICAL SEAL:

APPROVAL BY CONSULTANTS

THIS GRADING PLAN IS ACCEPTABLE IN REGARD TO SOILS (AND GEOLOGIC, IF APPLICABLE) CONDITIONS AND CONFORMS TO THE RECOMMENDATIONS OF THE SUPPORTIVE REPORTS DATED AS FOLLOWED:

SOILS ENGINEERING REPORTS: XX/XX/XXXX

BY _____ (SIGNATURE) HASHMI QUASI (PRINT NAME) — SOILS ENGINEER REG. NO. XXXXX

COMPANY CONVERSE

ENGINEERING GEOLOGY REPORTS: GEOTECHNICAL REPORT FOR MOUNTAIN VIEW BAPTIST CHURCH

BY _____ (SIGNATURE) HASHMI QUAZI (PRINT NAME) — ENGINEERING GEOLOGIST C.E.G. NO. XXXX

COMPANY CONVERSE

FINAL GRADING CERTIFICATION

ENGINEER OF RECORD

I CERTIFY TO THE SATISFACTORY COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED PLANS. ALL DRAINAGE DEVICES REQUIRED BY THE GRADING PERMIT, GRADING PLANS, AND GRADING ORDINANCE HAVE BEEN INSTALLED. EROSION TREATMENT OF SLOPES AND IRRIGATION SYSTEMS (WHERE REQUIRED) HAVE BEEN INSTALLED. ADEQUATE PROVISION HAVE BEEN MADE FOR DRAINAGE OF SURFACE WATERS FROM EACH BUILDING SITE.

LOT NUMBERS _____

REMARKS _____

ENGINEER _____ (SIGNATURE) REG. NO. _____ EXP. DATE _____ DATE _____

GRADING CONTRACTOR CERTIFICATION

BY GRADING CONTRACTOR

I CERTIFY THAT THE GRADING WAS DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE GRADING ORDINANCE, AND THE RECOMMENDATIONS OF THE CIVIL ENGINEER, SOILS ENGINEER AND ENGINEERING GEOLOGIST. IT IS UNDERSTOOD THAT THIS CERTIFICATION INCLUDES ONLY THOSE ASPECTS OF THE WORK THAT CAN BE DETERMINED BY ME, AS A COMPETENT GRADING CONTRACTOR, WITHOUT SPECIAL EQUIPMENT OR PROFESSIONAL SKILLS.

GRADING CONTRACTOR _____ (SIGNATURE) LICENSE NO. _____ DATE _____

INSTRUCTIONS: THE OWNER MAY SIGN IF GRADING WAS NOT DONE BY A LICENSED GRADING CONTRACTOR.

DECLARATION OF ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES. AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBLE CHARGE FOR SUCH DESIGN. I UNDERSTAND AND ACKNOWLEDGE THAT THE PLAN CHECK OF THESE PLANS BY SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS - SPECIAL DISTRICTS (SD) IS A REVIEW FOR THE LIMITED PURPOSE OF ENSURING THAT THE PLANS COMPLY WITH SD PROCEDURES, APPLICABLE POLICES AND ORDINANCES. THE REVIEWS, RECOMMENDATIONS AND APPROVALS ARE NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH PLAN CHECK DOES NOT, THEREFORE, RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. AS ENGINEER OF RECORD, I AGREE TO INDEMNIFY AND HOLD SD, IT'S OFFICERS, AGENTS, AND EMPLOYEES HARMLESS FROM ANY AND ALL LIABILITY, CLAIMS, DAMAGES OR INJURIES TO ANY PERSON OR PROPERTY WHICH MIGHT ARISE FROM THE NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE ENGINEER OF RECORD. I HAVE READ AND INFORMED THE PROJECT APPLICANT/DEVELOPER THAT APPROVAL OF THESE PLANS DO NOT RELIEVE THEM FROM THE REQUIREMENTS OF THE DESIGN CONDITIONS.

BY: _____ NAME _____ RCE NO. _____ DATE _____

NOTIFICATIONS

AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL NOTIFY:
1. SPECIAL DISTRICTS - (XXX) XXX-XXXX
2. PERMIT AGENCY: CITY OF XXXXXX - (XXX) XXX-XXXX
3. UNDERGROUND SERVICE ALERT (USA): 811
4. ALL OTHER AFFECTED AGENCIES THAT ARE NOT MEMBERS OF USA ALERT

ABBREVIATIONS

BC	BEGINNING OF CURVE	N	NORTH
℄	CENTERLINE	NO.	NUMBER
CONC.	CONCRETE	PL	PROPERTY LINE
DIA	DIAMETER	PROP	PROPOSED
EC	END OF CURVE	RC	REINFORCED CONCRETE
ELEC	ELECTRICITY LINE	RCB	REINFORCED CONCRETE BOX
ELEV/EL	ELEVATION	RCE	REGISTERED CIVIL ENGINEER
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
EX/EXIST	EXISTING	RIM	TOP ELEVATION
FG	FINISHED GRADE	RM	ROOM
FL	FLOW LINE ELEVATION	RW	RECYCLED WATER
HGL	HYDRAULIC GRADE LINE	R/W	RIGHT OF WAY
INT	INTERSECTION	SS	SANITARY SEWER
HGL	HYDRAULIC GRADE LINE	SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION
INT	INTERSECTION		
INV	INVERT	STA/STA.	STATION
IRR	IRRIGATION PIPE	STD	STANDARD
JS	JUNCTION STRUCTURE	TC	TOP OF CURB
LT	LEFT	TRANS	TRANSITION
LAT	LATERAL	TW	TOP OF WALL
LF/L.F.	LINEAR FEET	W/WTR	WATER OR DOMESTIC WATER
MH	MANHOLE	WW	WASTEWATER
MIN	MINIMUM		

LEGEND

SYMBOL	DESCRIPTION
	RIGHT-OF-WAY / PROPERTY LINE
	EXISTING SEWER MAIN
	EXISTING POTABLE WATER MAIN
	EXISTING GAS
	EXISTING TELEPHONE
	EXISTING ELECTRICAL
S	EXISTING SEWER LATERAL
W	EXIST POTABLE WATER LATERAL
	EXISTING MANHOLE FOR SEWER MAINS
	CIPP LINING OR WATER REPLACEMENT
W	WATER REPLACEMENT
120	CONTOUR LINE - MAJOR
	CONTOUR LINE - MINOR
	GRADE BREAK
R	RIDGE LINE
	FLOW LINE
X / XX	SECTION IDENTIFICATION AND LOCATION

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
CALL BEFORE YOU DIG
Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
ELEVATIONS SHOWN HEREON ARE EXPRESSED IN THE U.S. SURVEY FEET AND ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88) AND DEFINED LOCALLY USING THE ORTHOMETRIC HEIGHT FOR CORS STATION EWPP. SITE BENCHMARK AT POINT NO. 7000 DERIVED FROM STATIC OBSERVATIONS. ELEVATION = 4587.05'

BASIS OF BEARINGS:
BEARINGS SHOWN ON THIS MAP ARE REFERENCED TO THE CALIFORNIA COORDINATE SYSTEM, CCS83 (2011) EPOCH 2010.00, ZONE 05, DEFINED LOCALLY BY NGS PID'S EWPP, P598, & P470 ACCORDING TO THE GEODETIC POSITIONS AS PUBLISHED BY NGS. ALL DISTANCES AND COORDINATES ARE REFERENCED TO CCS83 ZONE 05 GRID AND ARE EXPRESSED IN US SURVEY FOOT UNITS.

J. SMITH & T. MULI
JS&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH — PROFESSIONAL ENGINEER — R.C.E. No. 058654 — DATE 09/08/2023

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

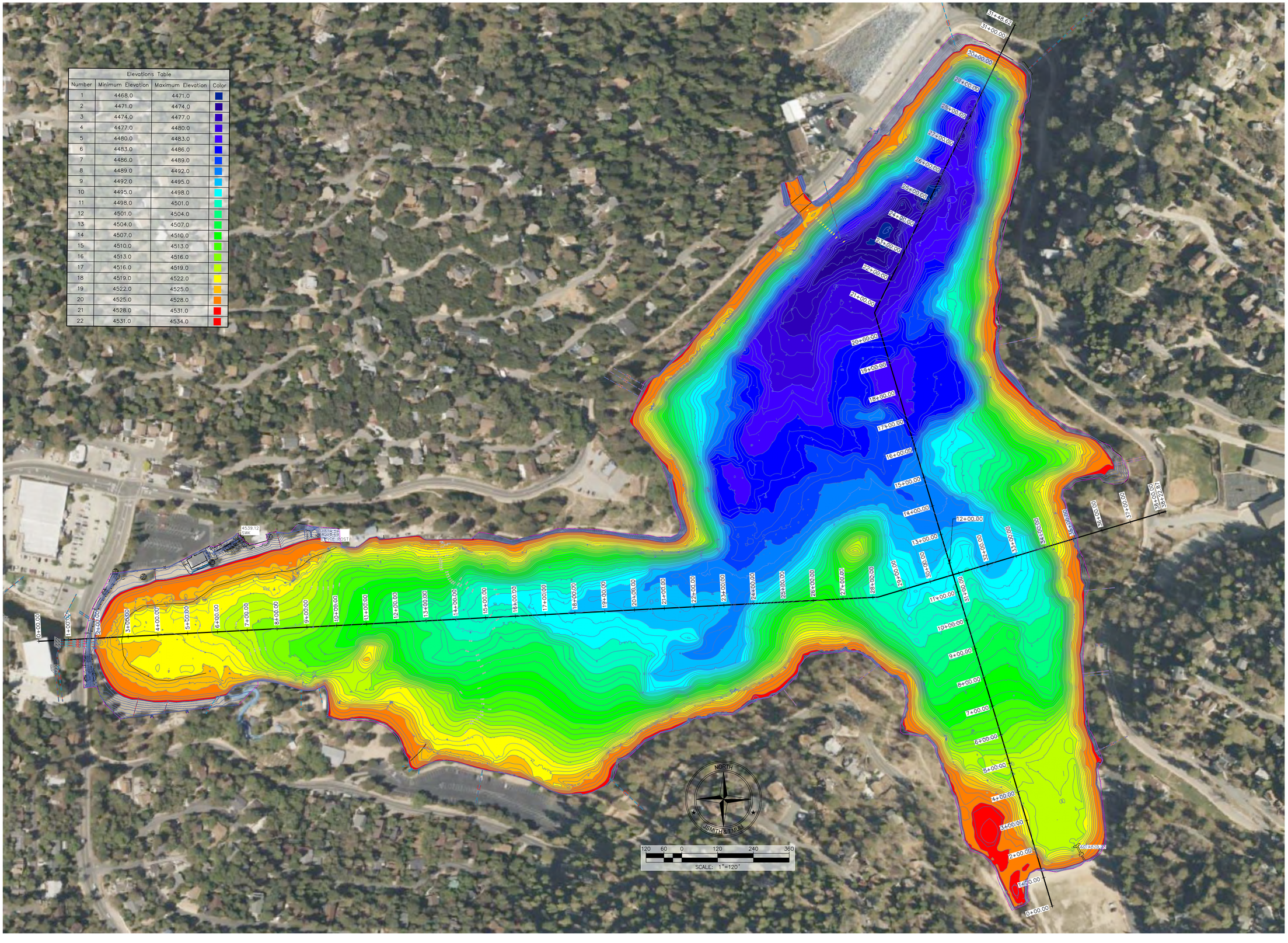
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

TITLE SHEET

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 1 OF 16

C:\Users\tmuli\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-1_TITLE SHEET.dwg 02/04/24 - 7:53pm tmuli



Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	4468.0	4471.0	
2	4471.0	4474.0	
3	4474.0	4477.0	
4	4477.0	4480.0	
5	4480.0	4483.0	
6	4483.0	4486.0	
7	4486.0	4489.0	
8	4489.0	4492.0	
9	4492.0	4495.0	
10	4495.0	4498.0	
11	4498.0	4501.0	
12	4501.0	4504.0	
13	4504.0	4507.0	
14	4507.0	4510.0	
15	4510.0	4513.0	
16	4513.0	4516.0	
17	4516.0	4519.0	
18	4519.0	4522.0	
19	4522.0	4525.0	
20	4525.0	4528.0	
21	4528.0	4531.0	
22	4531.0	4534.0	

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

CALL BEFORE YOU DIG

Call: TOLL FREE
1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

ELEVATIONS SHOWN HEREON ARE EXPRESSED IN THE U.S. SURVEY FEET AND ARE REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88) AND DEFINED LOCALLY USING THE ORTHOMETRIC HEIGHT FOR CORS STATION EWPP. SITE BENCHMARK AT POINT NO. 7000 DERIVED FROM STATIC OBSERVATIONS. ELEVATION = 4587.05'

BASIS OF BEARINGS:

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J. SMITH & T. MULI
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 - JSTMINC.COM

JONIS C. SMITH	058654	09/08/2023
PROFESSIONAL ENGINEER	R.C.E. No.	DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR			DATE
APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

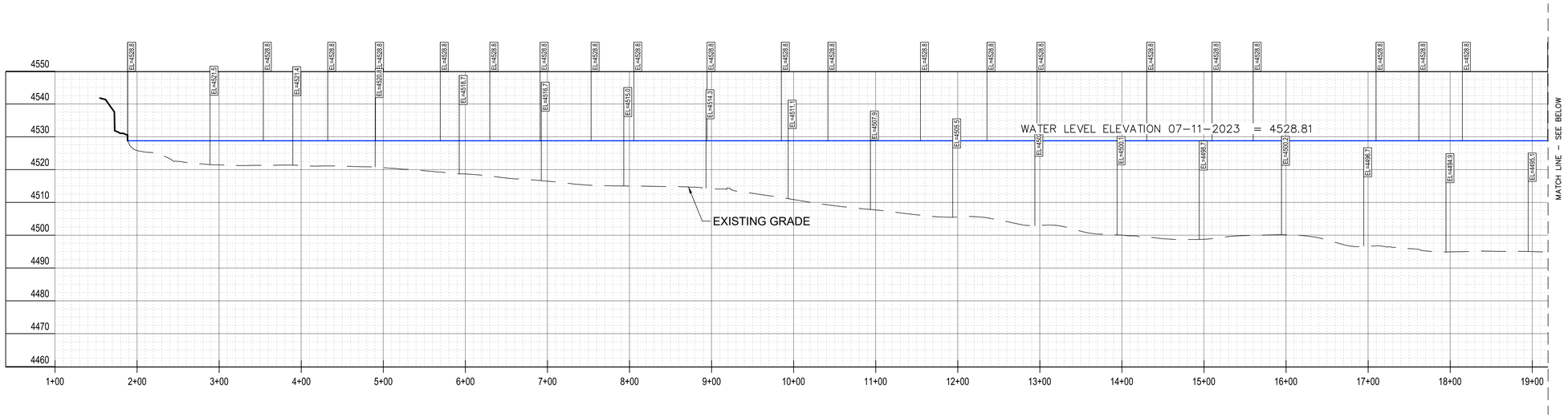
IMPROVEMENT PLANS

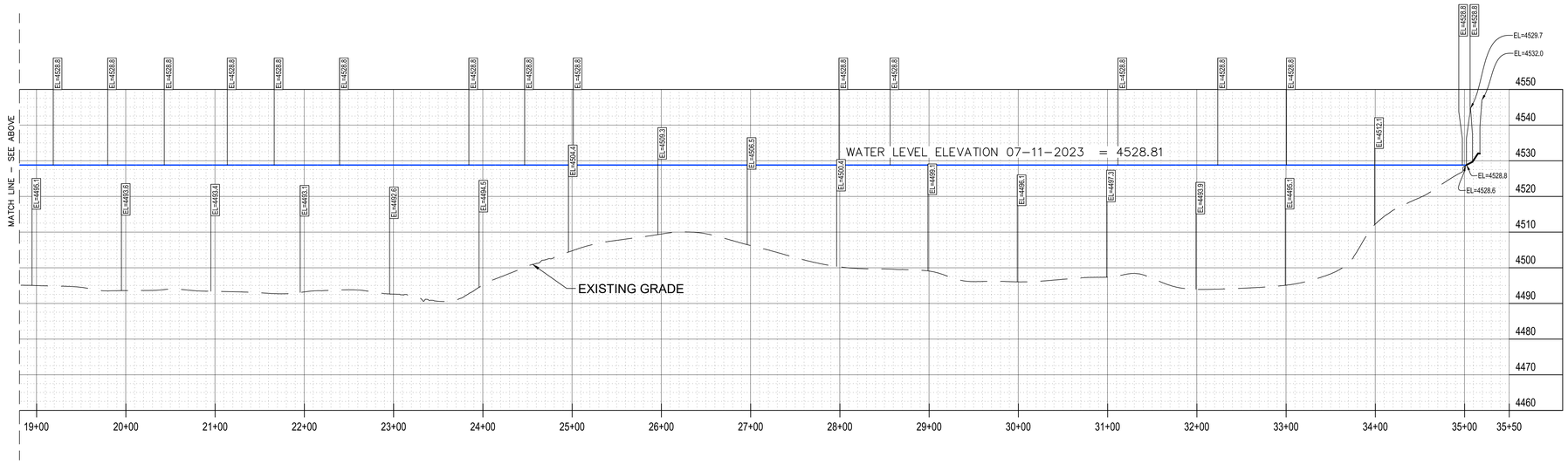
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

EXISTING CONDITION LAYOUT

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 2 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-2_EX LAKE LAYOUT.dwg 02/23/24 - 6:36pm Muli Tim





60 30 0 60 120 180

SCALE: 1"=60'

WEST – EAST PROFILE

SCALE: 1" = 60'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

Call: TOLL FREE
1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

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JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

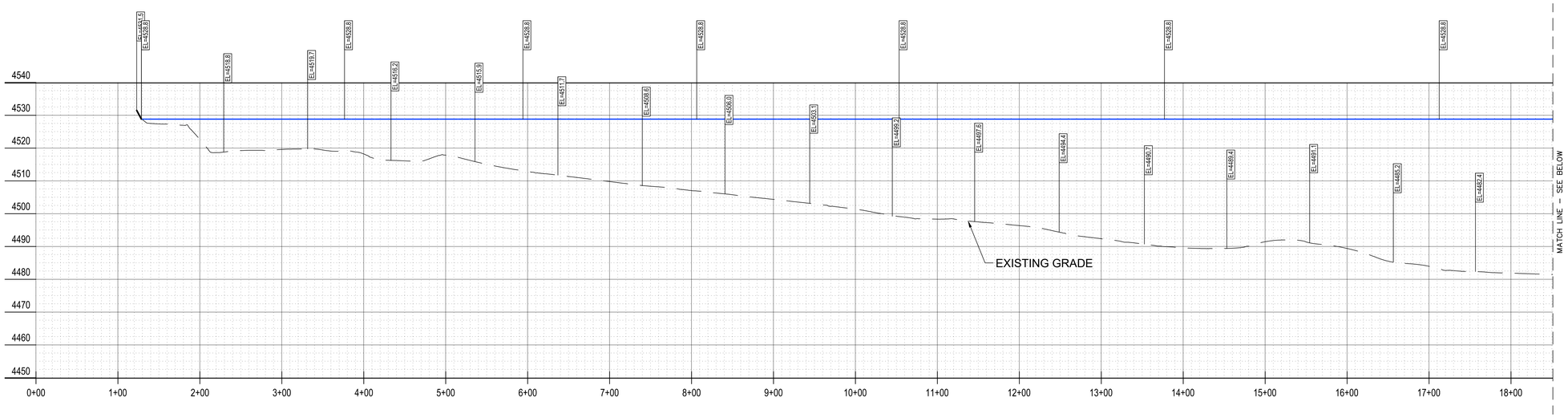
IMPROVEMENT PLANS

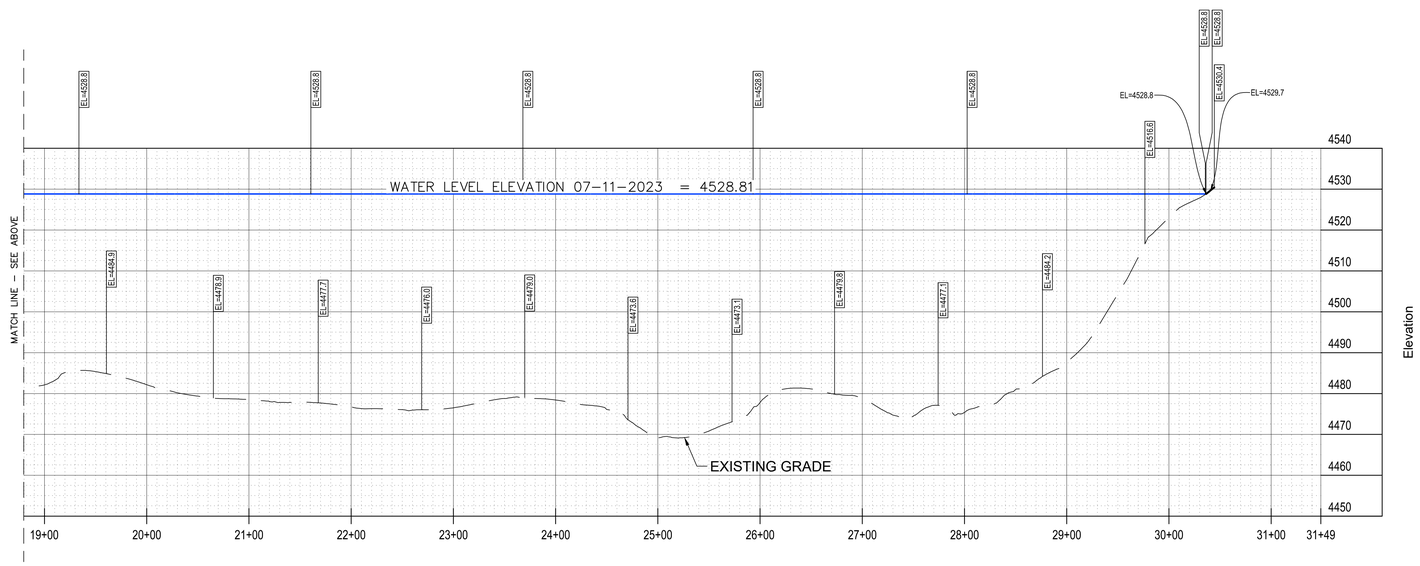
LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

EXISTING CONDITION: WEST-EAST PROFILE

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 3 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-3-4_EX LAKE CROSS SECTIONS.dwg 02/23/24 - 6:08pm Muli Tim





60 30 0 60 120 180

SCALE: 1"=60'

SOUTH – NORTH PROFILE

SCALE: 1" = 60'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT

CALL BEFORE YOU DIG

Call: TOLL FREE

1-800-227-2600
OR
811

TWO WORKING DAYS BEFORE YOU DIG

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REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

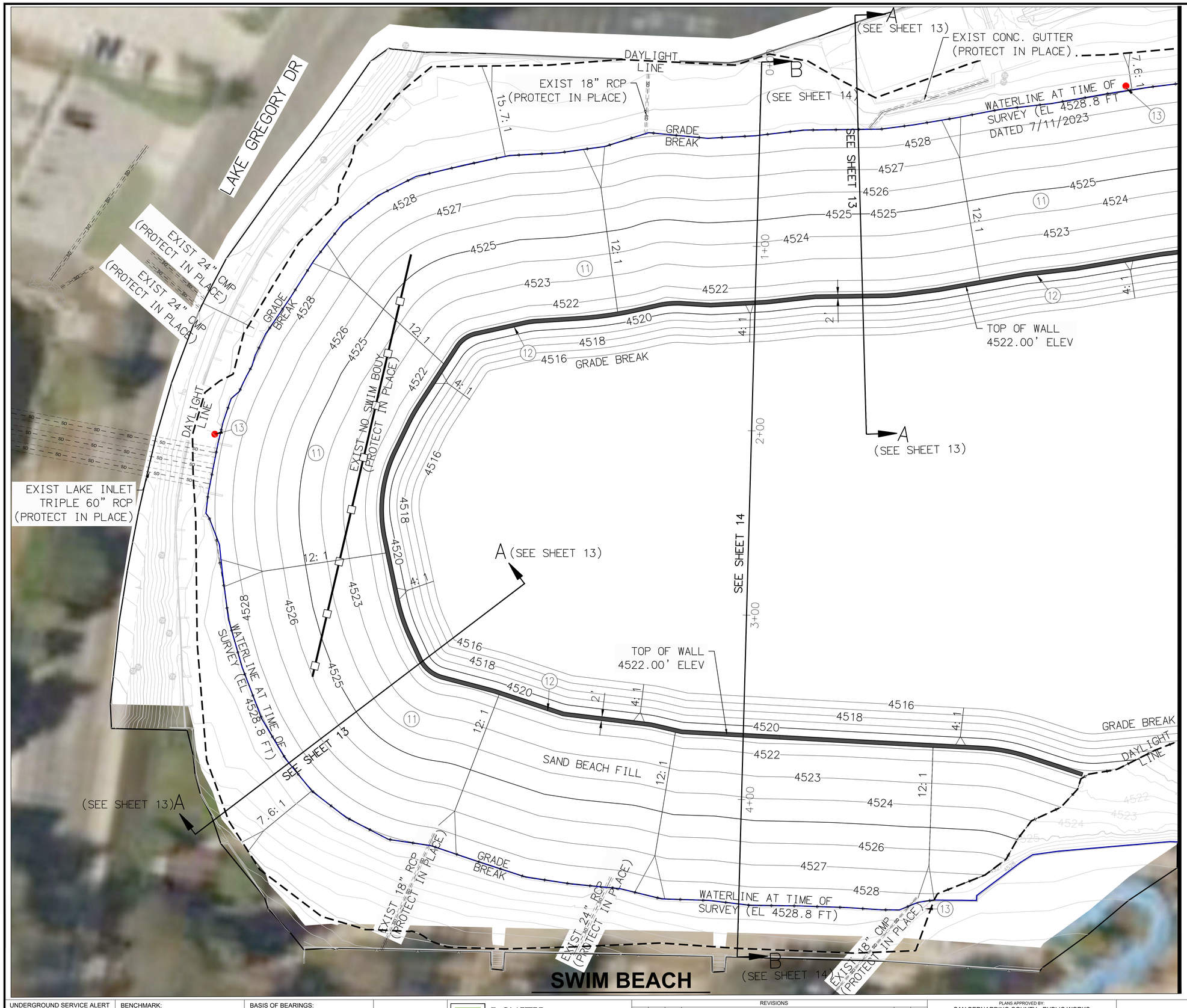
EXISTING CONDITION: SOUTH-NORTH PROFILE

DWG NO. XX.XX.XXXX

FILE NO. XXX-XXX

SHEET 4 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JSETM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-3-4_EX LAKE CROSS SECTIONS.dwg 02/23/24 - 6:11pm Muli Tim



MATCHLINE - SEE SHEET 6

LEGEND:

- DREDGING BOUNDARY/ DAYLIGHT LINE
- CUTOFF WALL LOCATION
- NO SWIM/NO BOAT BOUY LINE
- NO DIVING SIGN

CONSTRUCTION NOTES

(11) FURNISH AND INSTALL WHITE SAND BEACH FILL MATERIAL PER PLAN AND SPECIFICATIONS

(12) CONSTRUCT REINFORCED CONCRETE CUTOFF WALL PER PLAN AND DETAIL 19 ON SHEET 13

(13) FURNISH AND INSTALL SIGN PER COUNTY OF SAN BERNARDINO ENVIRONMENTAL HEALTH SCIENCES DEPARTMENT OF PUBLIC HELATH CONSTRUCTION GUIDE AND DETAIL 13 ON SHT 16

NOTES:

1. THE LOCATIONS OF EXISTING UTILITIES AND SURFACE FEATURES ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND DOCUMENT THE LOCATIONS OF EXISTING UTILITIES AND SURFACE FEATURES IN THE VICINITY OF THE WORK BEFORE COMMENCING EARTHWORK.
2. WATER SURFACE ELEVATION SHOWN ON PLANS IS APPROXIMATE. CONTRACTOR SHALL VERIFY WATER SURFACE ELEVATION BEFORE COMMENCING EARTHWORK.
3. AERIAL IMAGERY SHOWN ON PLANS MAY VARY FROM CURRENT EXISTING CONDITIONS AND TOPOGRAPHIC INFORMATION.
4. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING SURFACE IMPROVEMENTS AND UTILITIES.

NORTH
JSMITH & TMULI

20 10 0 20 40 60
SCALE: 1"=20'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
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JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

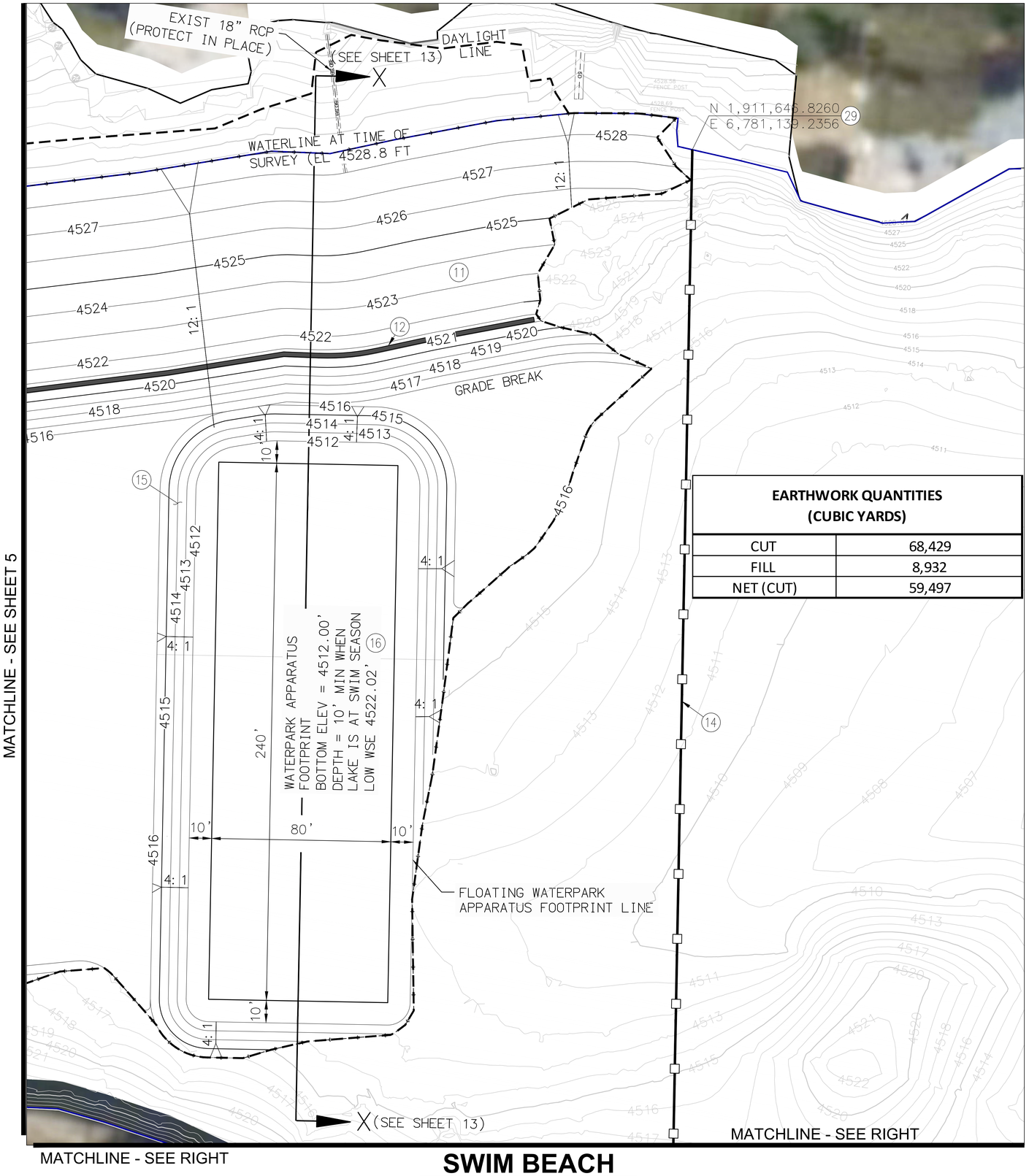
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED SWIM BEACH GRADING

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 5 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-5-6_PR GRADING.dwg 02/23/24 - 7:18pm Muli Tim



MATCHLINE - SEE LEFT

EARTHWORK QUANTITIES (CUBIC YARDS)	
CUT	68,429
FILL	8,932
NET (CUT)	59,497

LEGEND:

- DREDGING BOUNDARY/ DAYLIGHT LINE
- CUTOFF WALL LOCATION
- NO SWIM/NO BOAT BOUY LINE
- NO DIVING SIGN

CONSTRUCTION NOTES

11. FURNISH AND INSTALL WHITE SAND BEACH FILL MATERIAL PER PLAN AND SPECIFICATIONS
12. CONSTRUCT REINFORCED CONCRETE CUTOFF WALL PER PLAN AND DETAIL 19 ON SHEET 13
14. FURNISH AND INSTALL MARINE RESCUE 3 STRAND 3/4" BLUE/WHITE POLYPRO ROPE BOUY LINE WITH 5"X9" ORANGE/WHITE LLF590 HANDI-LOCK FLOATS AT 5'-7" SPACING. 423 MARKER BOUY EVERY 200 FEET.
15. WATER PARK GRADING PER PLAN AND DETAIL ON SHEET 13
16. RELOCATE WATER PARK APPARATUS TO LOCATION SHOWN PER DIRECTION OF THE DISTRICT ENGINEER
29. FURNISH AND INSTALL BOUY LINE ANCHOR PER DETAIL 30 ON SHEET 15

NOTES:

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3. AERIAL IMAGERY SHOWN ON PLANS MAY VARY FROM CURRENT EXISTING CONDITIONS AND TOPOGRAPHIC INFORMATION.
4. CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING SURFACE IMPROVEMENTS AND UTILITIES.
5. ACCESS SHOWN SUBJECT TO CHANGE BASED ON CURRENT WATER SURFACE ELEVATION. CONTRACTOR TO VERIFY.

NORTH
J.SMITH & T.MULI

20 10 0 20 40 60
SCALE: 1"=20'

95% PROGRESS SET
NOT FOR CONSTRUCTION

SWIM BEACH

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JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM, DIVISION MANAGER		

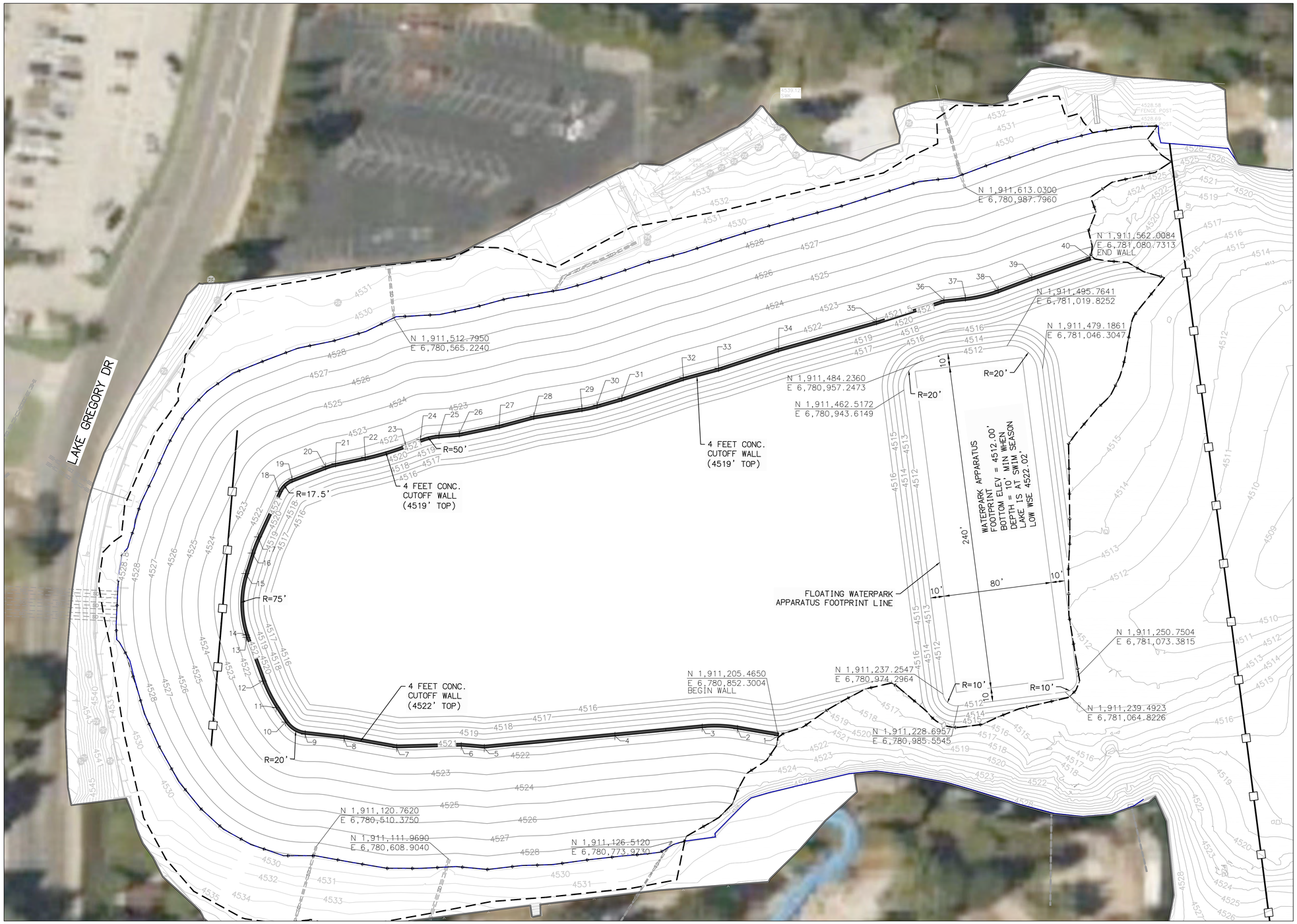
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED SWIM BEACH GRADING

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 6 OF 16

C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-5-6_PR GRADING.dwg 02/23/24 - 7:19pm Muli Tim



POINT TABLE

POINT #	NORTHING	EASTING	ELEVATION
1	1911205.4650	6780852.3004	4522.00
2	1911210.3421	6780822.0216	4522.00
3	1911211.0890	6780795.8798	4522.00
4	1911204.4353	6780731.2403	4522.00
5	1911194.7809	6780634.4630	4522.00
6	1911196.0642	6780617.3299	4522.00
7	1911194.4635	6780569.5155	4522.00
8	1911201.0141	6780530.4133	4522.00
9	1911204.0001	6780501.6025	4522.00
10	1911212.8801	6780486.9699	4522.00
11	1911223.5382	6780479.9386	4522.00
12	1911243.2366	6780469.8745	4522.00
13	1911275.5550	6780457.6539	4522.00
14	1911277.2011	6780457.1022	4522.00
15	1911322.8775	6780456.4676	4522.00
16	1911338.0384	6780461.0838	4522.00
17	1911350.1258	6780465.6361	4522.00
18	1911383.9309	6780480.9282	4522.00
19	1911393.0156	6780490.4971	4522.00
20	1911402.7007	6780515.2540	4522.00
21	1911404.9510	6780522.6440	4522.00
22	1911409.8086	6780544.5467	4522.00
23	1911418.8876	6780574.3058	4522.00
24	1911423.2784	6780585.5058	4522.00
25	1911426.5121	6780599.1144	4522.00
26	1911427.9142	6780614.1552	4522.00
27	1911434.1922	6780643.8018	4522.00
28	1911441.1302	6780669.3169	4522.00
29	1911447.1595	6780704.9821	4522.00
30	1911449.7145	6780716.1437	4522.00
31	1911455.0294	6780734.4467	4522.00
32	1911470.6070	6780779.9549	4522.00
33	1911477.7984	6780806.0936	4522.00
34	1911492.5591	6780850.5251	4522.00
35	1911513.2978	6780922.9278	4522.00
36	1911529.5269	6780972.8379	4522.00
37	1911531.3624	6780988.6757	4522.00
38	1911537.3208	6781012.9514	4522.00
39	1911546.8512	6781037.8177	4522.00
40	1911562.0084	6781080.7313	4522.00

SWIM BEACH - HORIZONTAL CONTROL

SCALE: 1"=30'

NORTH
J.SMITH & T.MULI

30 15 0 30 60 90
SCALE: 1"=30'

95% PROGRESS SET
NOT FOR CONSTRUCTION

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REVISIONS

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PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED SWIM BEACH HORIZONTAL CONTROL

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 7 OF 16

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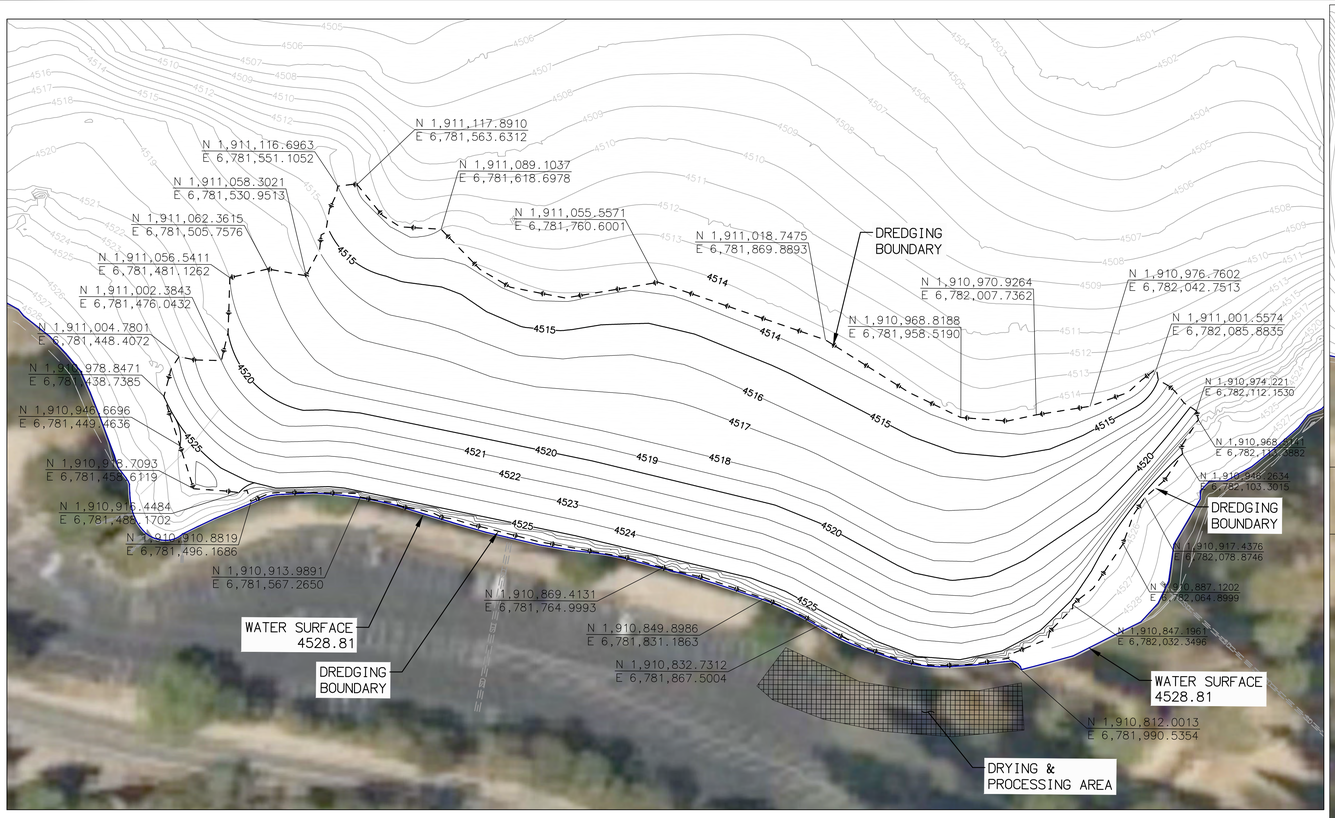


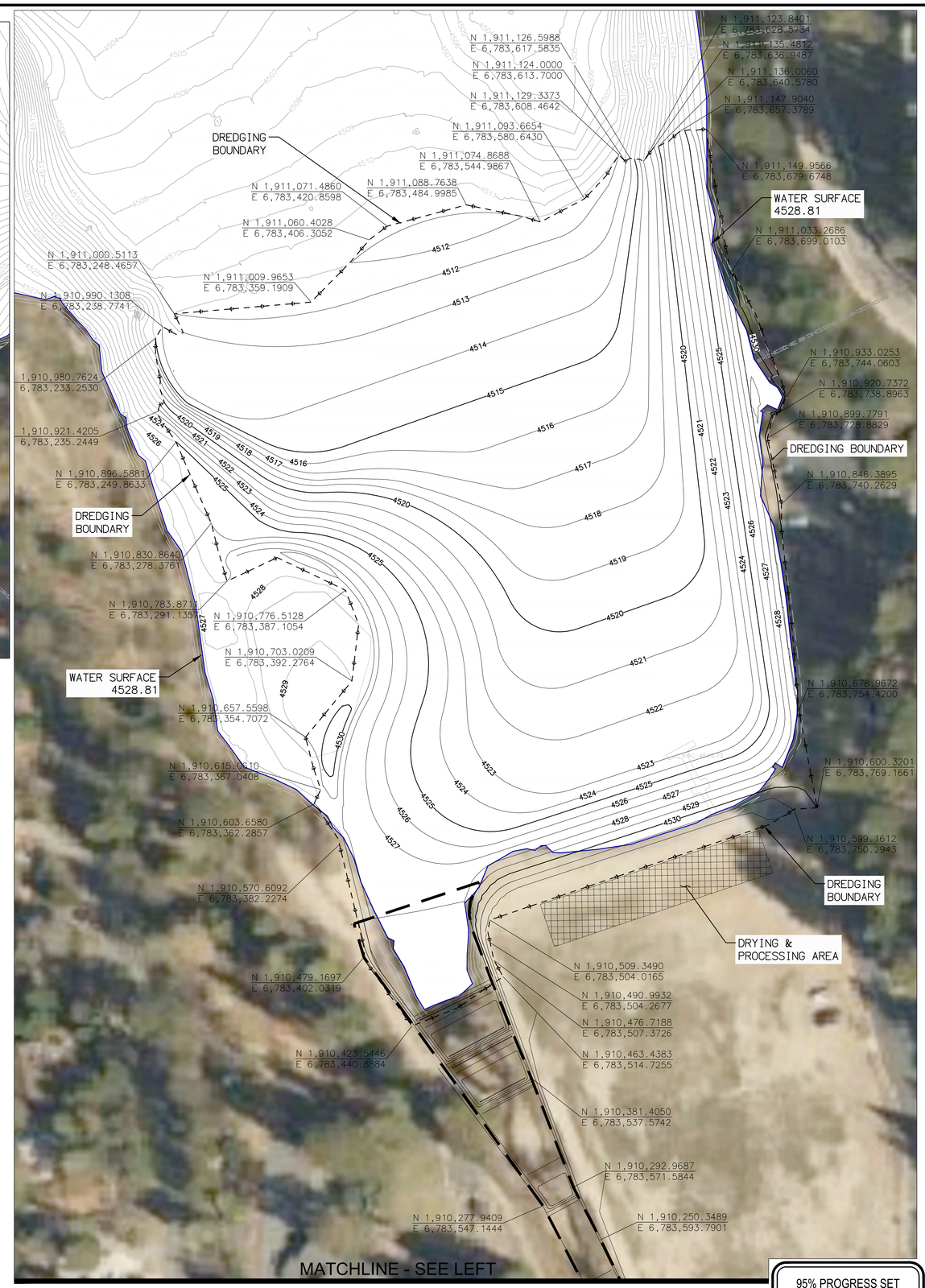
SOUTH BEACH

SCALE: 1"=40'

MATCHLINE - SEE RIGHT

SAN MORITZ CHANNEL/ BASINS

SCALE: 1"=40'



SOUTH LAKE AND SAN MORITZ CHANNEL/BASINS

SCALE: 1"=40'

NORTH
J.SMITH & T.MULI

40 20 0 40 80 120

SCALE: 1"=40'

95% PROGRESS SET
NOT FOR CONSTRUCTION

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SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

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	OPS. DIVISION MANAGER		
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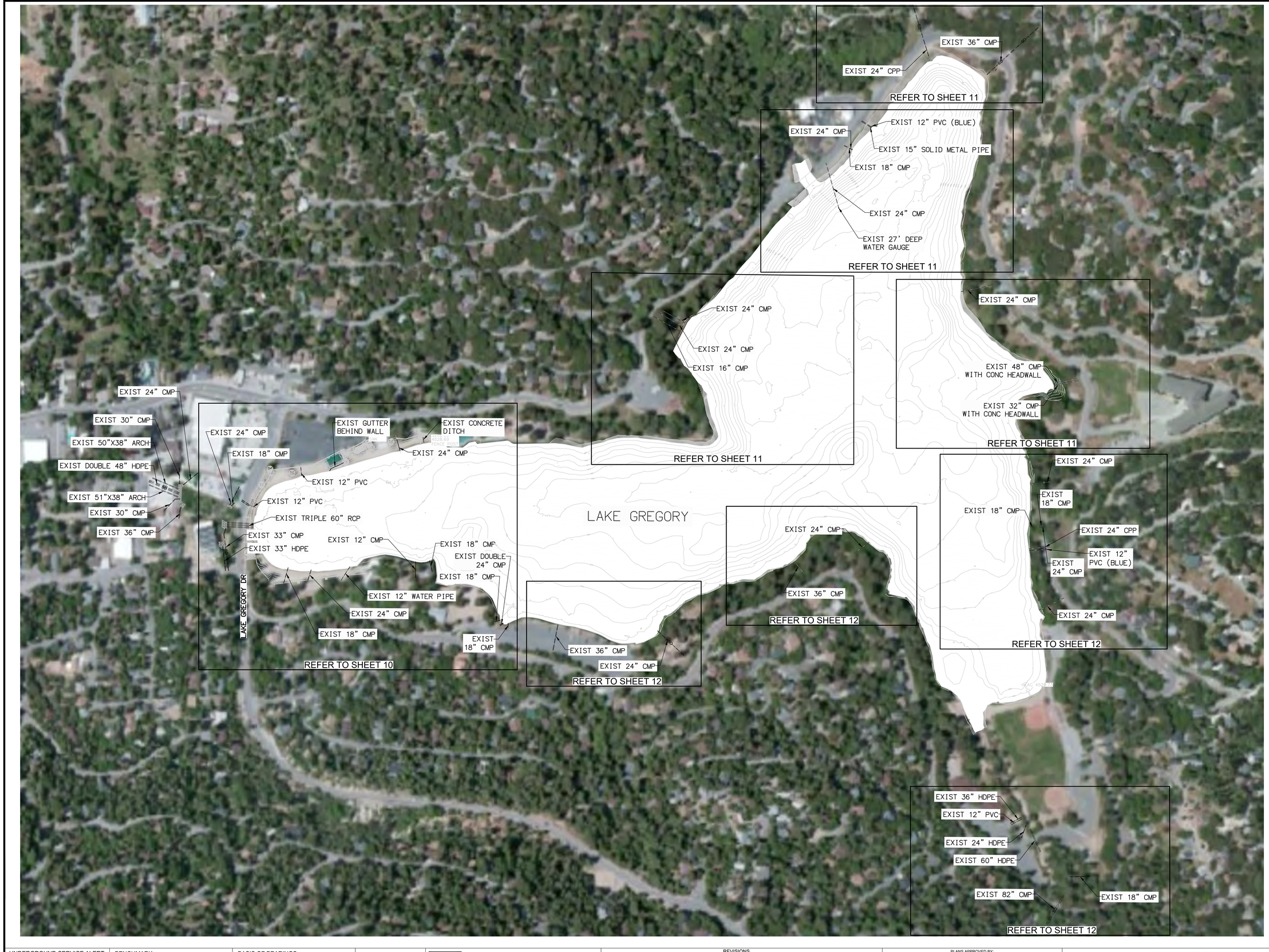
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 8 OF 16

C:\Users\tmuli\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-8_PR SOUTH BEACH GRADING.dwg 02/04/24 - 8:59pm tmuli



150 75 0 150 300 450

SCALE: 1"=150'

95% PROGRESS SET
NOT FOR CONSTRUCTION

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BENCHMARK:

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BASIS OF BEARINGS:

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J. SMITH & T. MULI
JS&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949).329.3639 · JSTMINC.COM

JONIS C. SMITH	058654	09/08/2023
PROFESSIONAL ENGINEER	R.C.E. No.	DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

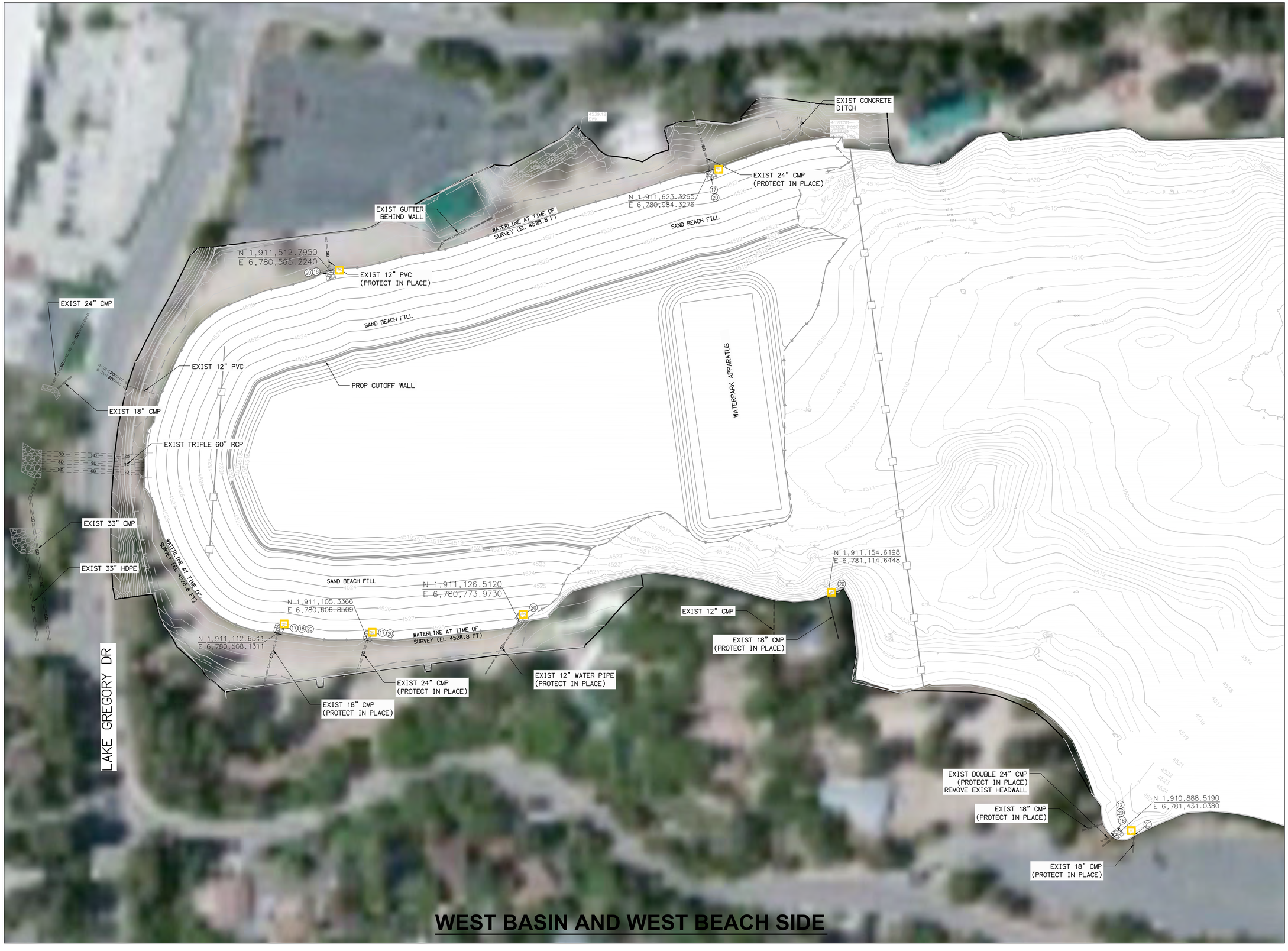
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

INLETS SHEET INDEX AND EXISTING LAKE INLETS LAYOUT

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 9 OF 16

C:\Users\tmuli\U. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-9_LAKE INLETS.dwg 02/04/24 - 9:02pm tmuli



WEST BASIN AND WEST BEACH SIDE

CONSTRUCTION NOTES

(12) CONSTRUCT REINFORCED CONCRETE CUTOFF WALL PER PLAN AND DETAIL 19 ON SHEET 13

(17) SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL 18 ON SHEET 13

(18) SAWCUT EXISTING CMP SECTION, AND INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL ON SHEET 13

(20) CONSTRUCT 10'X10' RIPRAP ENERGY DISSIPATOR PER PLAN AND DETAIL 20 ON SHEET 14

NORTH
J.SMITH & T.MULI

40 20 0 40 80 120
SCALE: 1"=40'

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JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS

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PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED IMPROVEMENTS AT EXISTING LAKE INLETS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 10 OF 16

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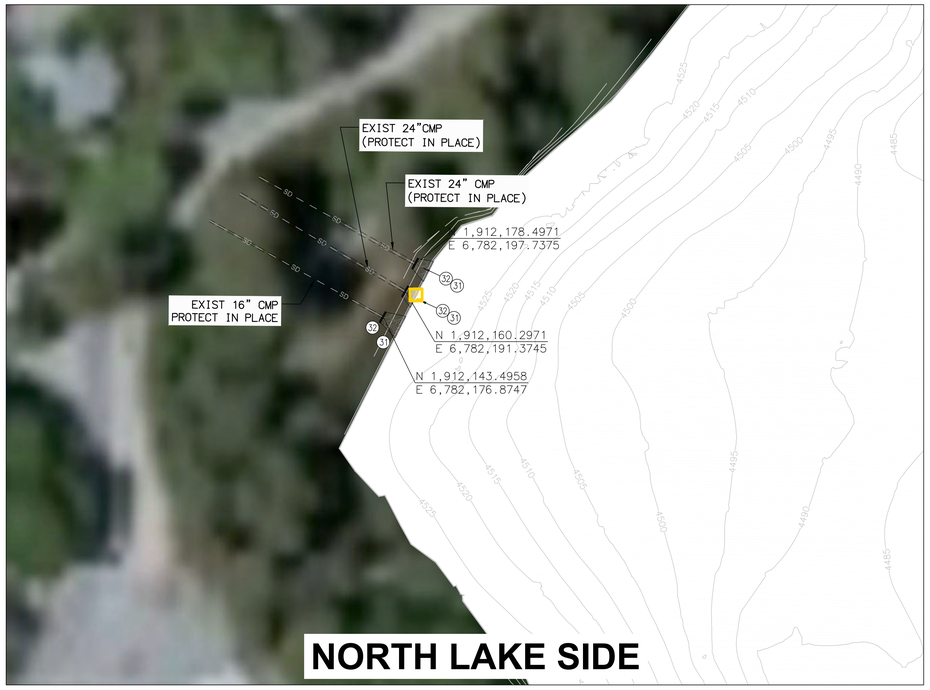
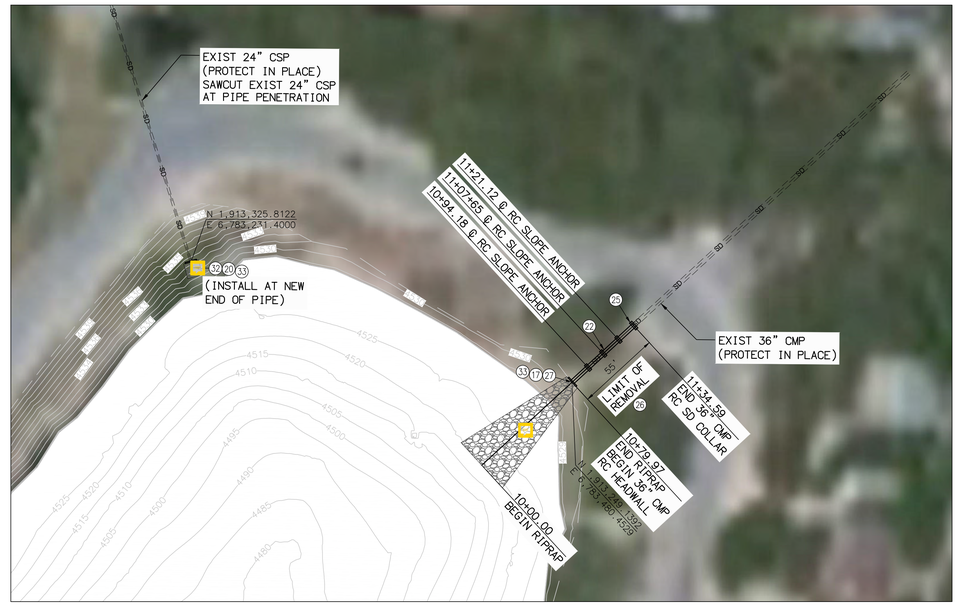




NORTH LAKE SIDE

CONSTRUCTION NOTES

(17) SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL 18 ON SHEET 13

(20) CONSTRUCT 10'X10' RIPRAP ENERGY DISSIPATOR PER PLAN AND DETAIL 20 ON SHEET 14

(22) CONSTRUCT CONCRETE COLLAR AT PIPE PENENTRATION AND EXTEND PIPE PER PLAN AND AND DETAIL 28 HEREON

(25) CONSTRUCT REINFORCED CONCRETE COLLAR PER SPPWC STD PLAN 380-4

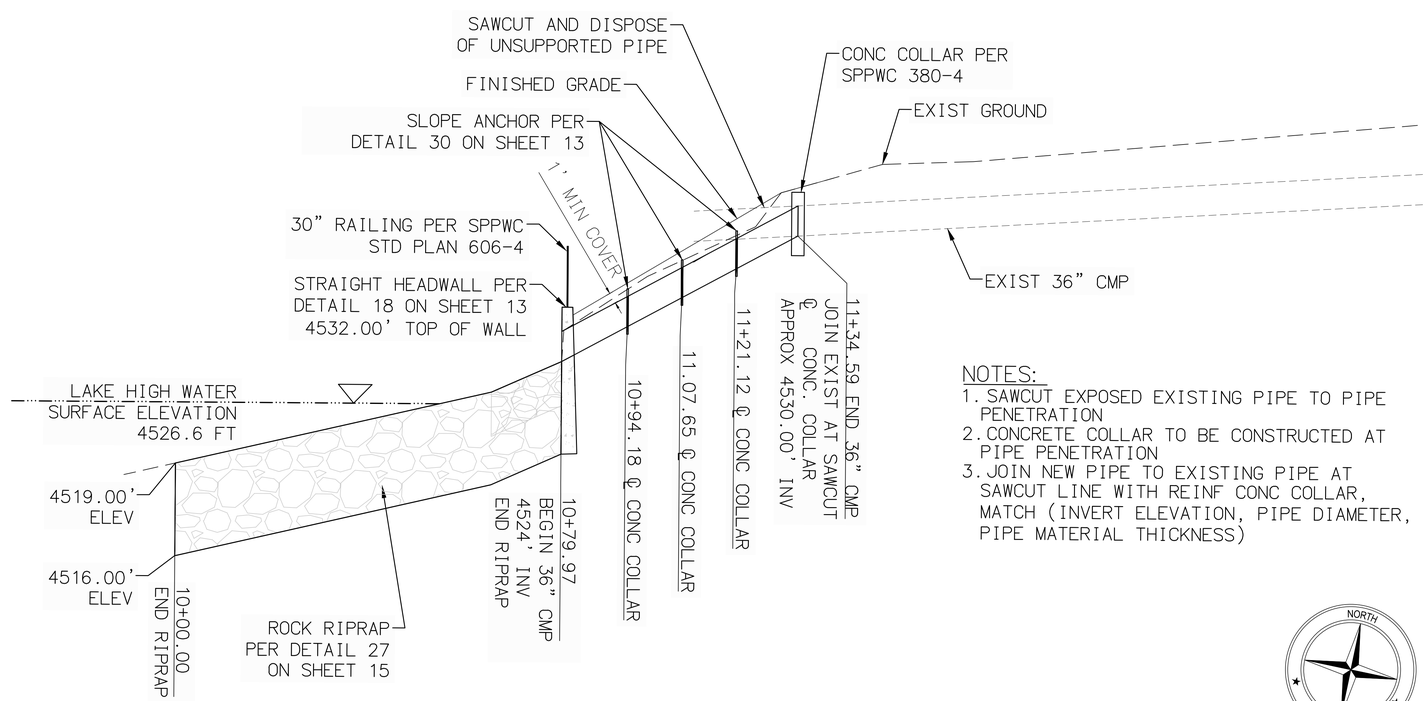
(26) ABANDON EXIST SD PIPE IN PLACE TO LIMITS SHOWN AND BACKFILL WITH CSLM PER SPPWC 306-12.3

(27) CONSTRUCT RIP-RAP EROSION CONTROL BLANKET PER DETAIL 27 ON SHEET 15

(31) CONSTRUCT RIP-RAP EROSION CONTROL BLANKET PER DETAIL 27 LAYOUT TYPE C ON SHEET 15

(32) CONSTRUCT TYPE-1 STRAIGHT HEADWALL WITH CUTOFF WALL PER DETAIL 17 ON SHEET 13

(33) CONSTRUCT PROTECTIVE RAILING PER SSPWC STD PLAN 606-4 AND DETAIL 18 ON SHEET 13



NOTES:

1. SAWCUT EXPOSED EXISTING PIPE TO PIPE PENETRATION
2. CONCRETE COLLAR TO BE CONSTRUCTED AT PIPE PENETRATION
3. JOIN NEW PIPE TO EXISTING PIPE AT SAWCUT LINE WITH REINF CONC COLLAR, MATCH (INVERT ELEVATION, PIPE DIAMETER, PIPE MATERIAL THICKNESS)

NORTH LAKE SIDE

(28) STORM DRAIN CONSTRUCTION DETAIL

NOT TO SCALE

NORTH
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40 20 0 40 80 120
SCALE: 1"=40'

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JONIS C. SMITH | 058654 | 09/08/2023
PROFESSIONAL ENGINEER | R.C.E. No. | DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR — DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED IMPROVEMENTS AT EXISTING LAKE INLETS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 11 OF 16

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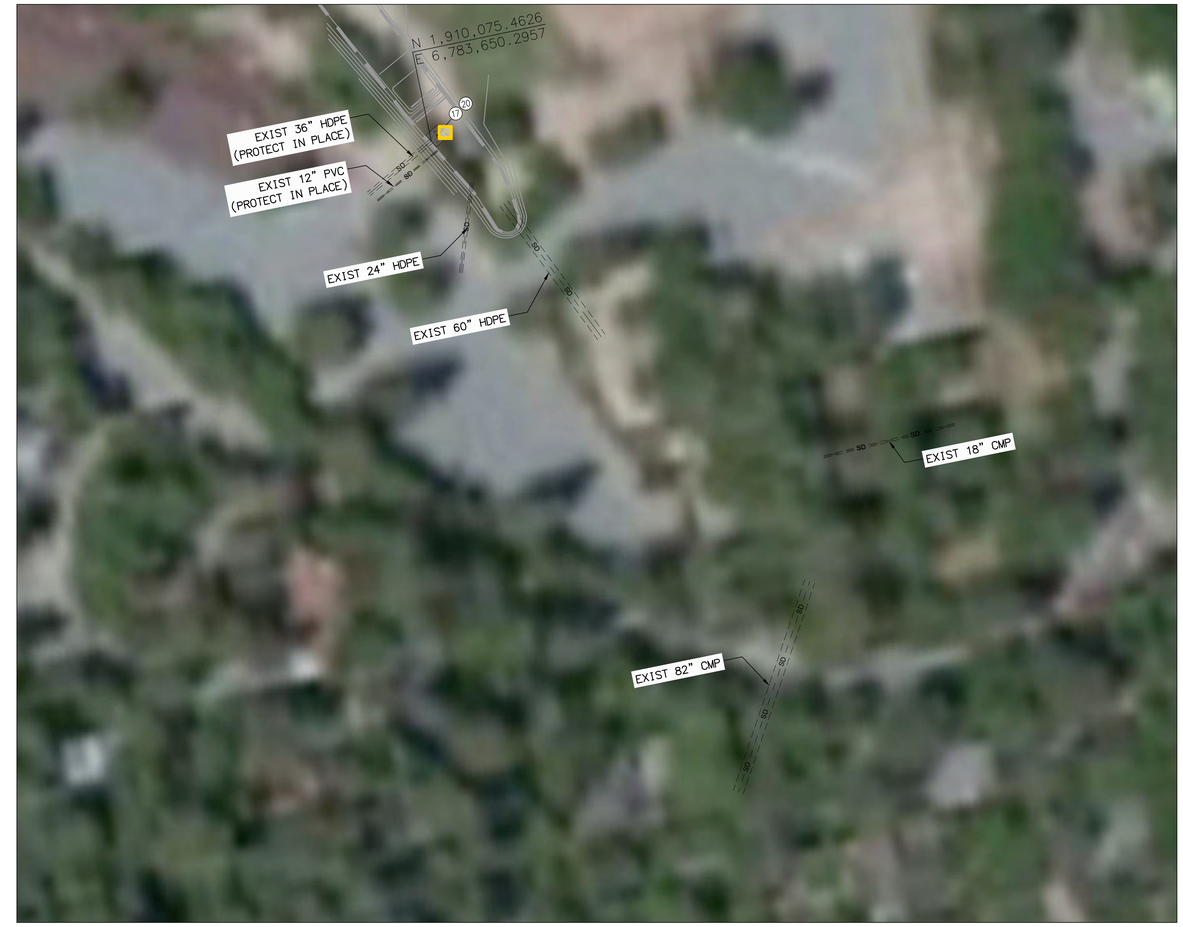
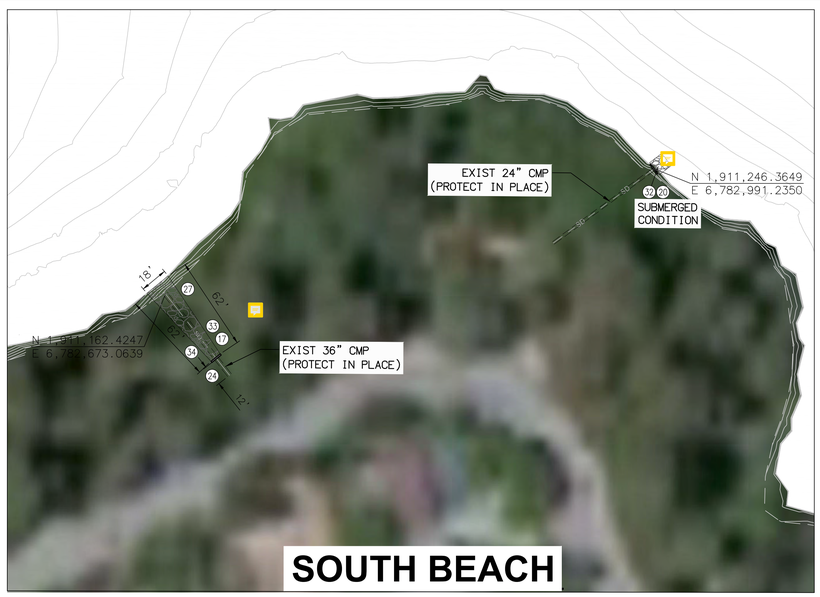
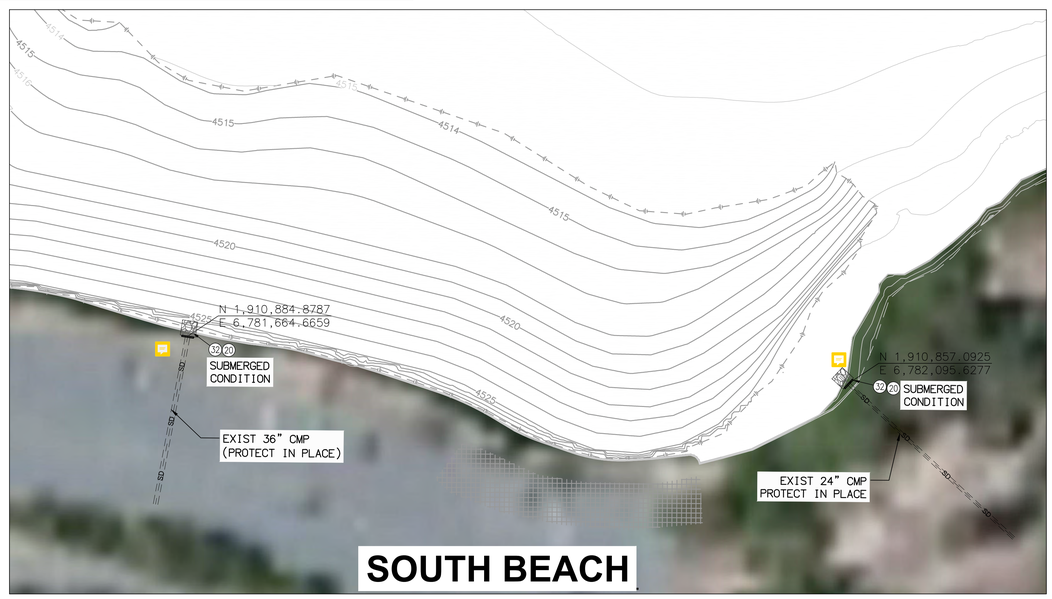
EAST LAKE SIDE



SOUTH LAKE AND MORITZ CHANNEL/BASINS



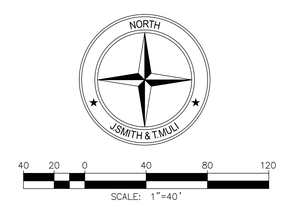
SOUTH BEACH



SOUTH BEACH

CONSTRUCTION NOTES

17. SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 2 STRAIGHT CONRETE HEADWALL PER DETAIL 18 ON SHEET 13
20. CONSTRUCT 10'X10' RIPRAP ENERGY DISSIPATOR PER PLAN AND DETAIL 20 ON SHEET 14
21. REMOVE AND PROPERLY DISPOSE OF EXIST ABANDONED CMP SD
23. CONSTRUCT NEW 24" CMP PER PLAN AND DETAIL 29 ON SHEET16
24. REMOVE EXIST SD PIPE TO LIMITS SHOWN
25. CONSTRUCT REINFORCED CONCRETE COLLAR PER SPPWC STD PLAN 380-4
26. ABANDON EXIST SD PIPE IN PLACE TO LIMITS SHOWN AND BACKFILL WITH CSLM PER SPPWC 306-12.3
27. CONSTRUCT RIP-RAP EROSION CONTROL BLANKET PER DETAIL 27 ON SHEET 15
32. CONSTRUCT TYPE-1 STRAIGHT HEADWALL WITH CUTOFF WALL PER DETAIL 17 ON SHEET 13
33. CONSTRUCT PROTECTIVE RAILING PER SSPWC STD PLAN 606-4 AND DETAIL 18 ON SHEET 13
34. SAWCUT CMP AT PIPE PENETRATION POINT. INSTALL TYPE 1 STRAIGHT CONRETE HEADWALL PER DETAIL 17 ON SHEET 13 AND CONSTRUCTION DETAIL 32 ON SHEET 16



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JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS		INITIAL	DATE
	PROJECT MANAGER		
	OPS. DIVISION MANAGER		
	PM. DIVISION MANAGER		

IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

PROPOSED IMPROVEMENTS AT EXISTING LAKE INLETS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 12 OF 16

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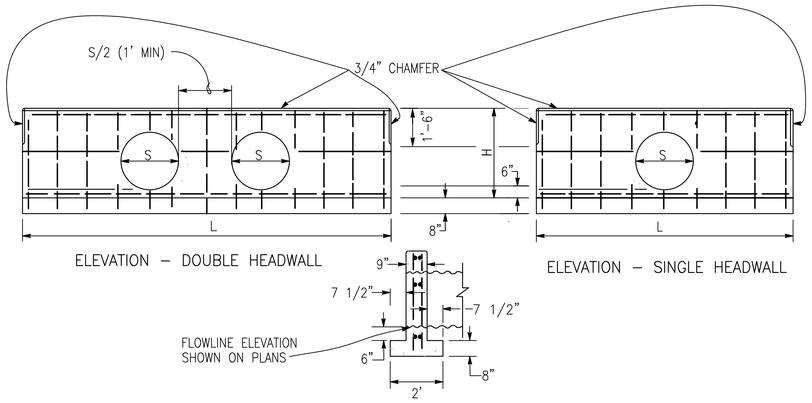
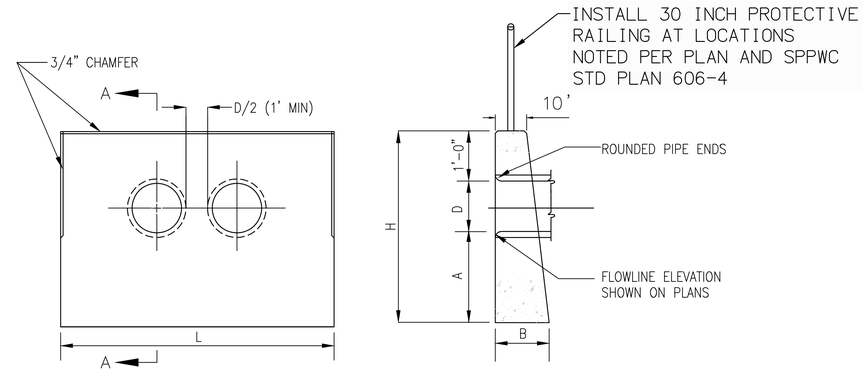


SECTION, SINGLE & DOUBLE HEADWALLS

C.S.P. SIZE (INCHES)	SINGLE				DOUBLE		
	H (FT/IN)	L (FT/IN)	STEEL (POUNDS)	CONCRETE (C.Y.)	L (FT/IN)	STEEL (POUNDS)	CONCRETE (C.Y.)
18	2'-7"	5'-6"	37	0.64	8'	52	0.91
21	2'-11"	6'-6"	45	0.80	10'	60	1.22
24	3'-2"	7'-6"	50	0.96	11'-6"	70	1.45
28	3'-4"	8'-6"	60	1.12	13'-6"	90	1.76
35	3'-8"	10'-6"	85	1.47	15'-6"	120	2.16
42	4'-1"	12'-6"	110	1.76	18'	145	2.57
49	4'-5"	14'-6"	130	2.26	21'	170	3.13
57	4'-10"	17'	155	2.81	24'-6"	210	3.86
64	5'-3"	19'	175	3.31	27'	230	4.42
71	5'-7"	21'	195	3.81	30'	255	5.09

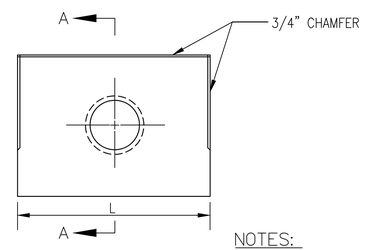
NOTES:
1. CONRETE SHALL BE 560-C-3250 WITH TYPE V PORTLAND CEMENT
2. ALL REINFORCING STEEL SHALL BE #4 BARS. ALL VERTICAL AND HORIZONTAL TIE BARS @18" MAXIMUM SPACING
3. EXPOSED CORNERS SHALL BE 3/4" CHAMFERED

(17) STRAIGHT HEADWALL - TYPE 1
NOT TO SCALE



DOUBLE PIPE ELEVATION

SECTION A–A

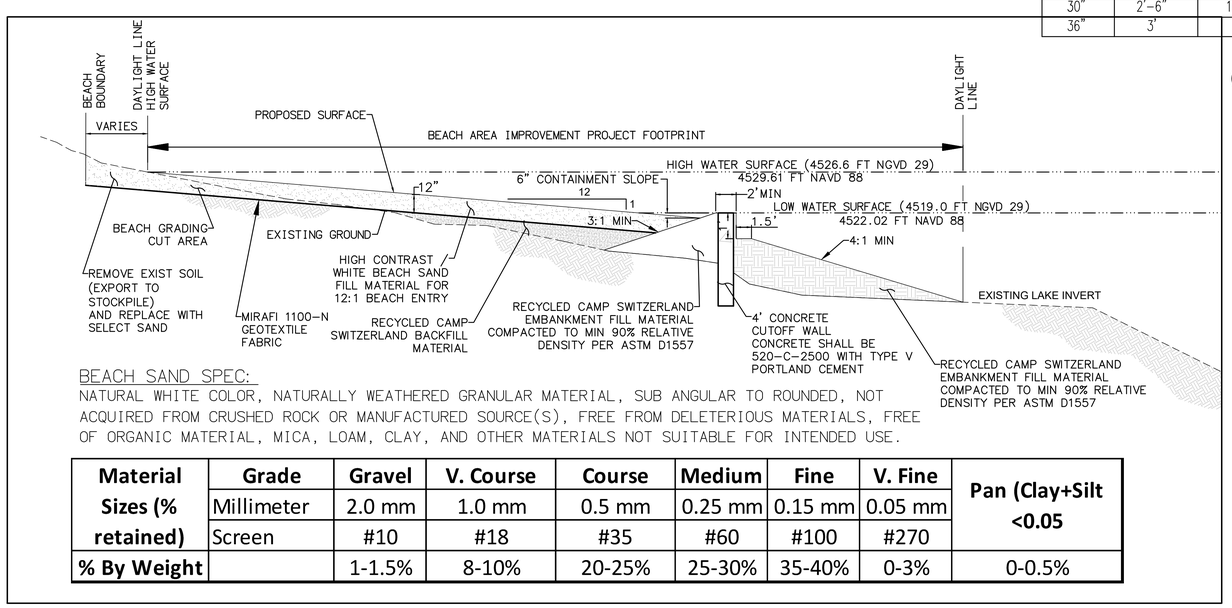


SINGLE PIPE ELEVATION

NOTES:
1. CONRETE SHALL BE 560-C-3250 WITH TYPE V PORTLAND CEMENT
2. EXPOSED CORNERS SHALL BE 3/4" CHAMFERED

D	A	B	H	SINGLE		DOUBLE	
				L	CONCRETE (C.Y.)	L	CONCRETE (C.Y.)
12"	2'	1'	4'	4'	0.45	5'-8"	.62
15"	2'	1'-1"	4'-3"	5'	0.63	7'-1"	.85
18"	2'	1'-2"	4'-6"	6'	0.83	8'-6"	1.12
24"	2'-6"	1'-5"	5'-6"	8'	1.54	11'-4"	2.09
30"	2'-6"	1'-9"	6'	10'	2.41	14'-2"	3.26
36"	3'	2'	7'	12'	3.74	17'	5.05

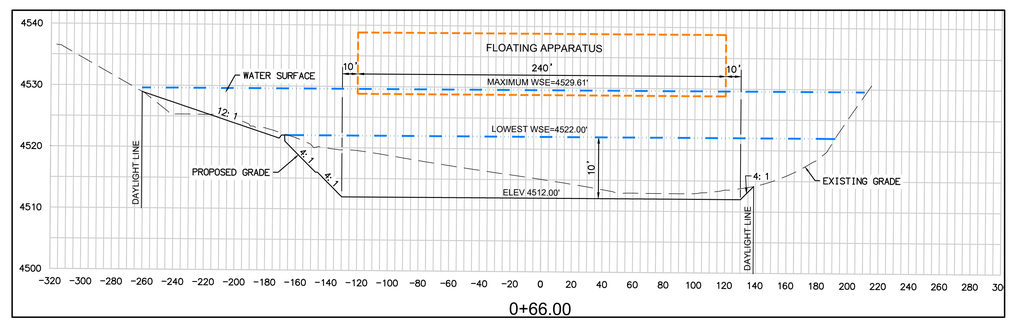
(18) STRAIGHT HEADWALL - TYPE 2
NOT TO SCALE



BEACH SAND SPEC:
NATURAL WHITE COLOR, NATURALLY WEATHERED GRANULAR MATERIAL, SUB ANGULAR TO ROUNDED, NOT ACQUIRED FROM CRUSHED ROCK OR MANUFACTURED SOURCE(S), FREE FROM DELETERIOUS MATERIALS, FREE OF ORGANIC MATERIAL, MICA, LOAM, CLAY, AND OTHER MATERIALS NOT SUITABLE FOR INTENDED USE.

Material Sizes (% retained)	Grade	Gravel	V. Course	Course	Medium	Fine	V. Fine	Pan (Clay+Silt <0.05
	Millimeter	2.0 mm	1.0 mm	0.5 mm	0.25 mm	0.15 mm	0.05 mm	
	Screen	#10	#18	#35	#60	#100	#270	
% By Weight		1-1.5%	8-10%	20-25%	25-30%	35-40%	0-3%	0-0.5%

(A) SECTION A-A: SAND BEACH ENTRY FILL SLOPE
(SEE SHEET 5)
NOT TO SCALE



(X) SECTION X-X: FLOATING APPARATUS
(SEE SHEET 5)
VERTICAL SCALE: 1"=4'

95% PROGRESS SET
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IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 13 OF 16

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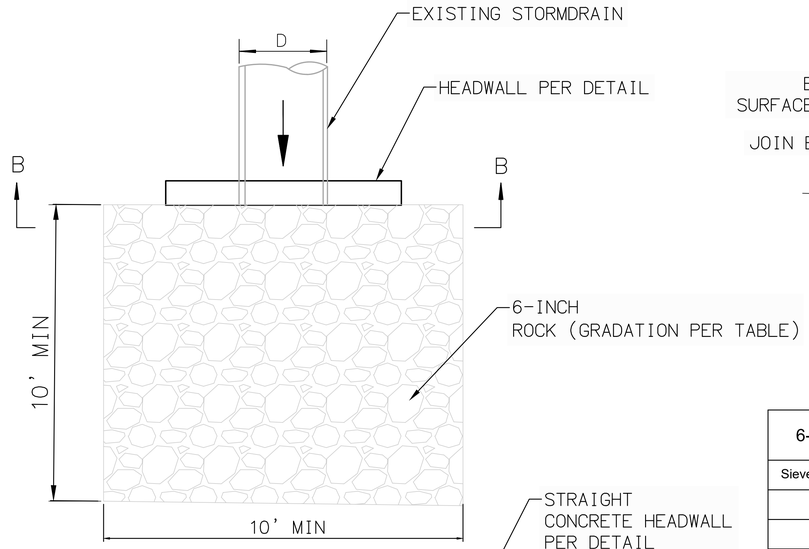
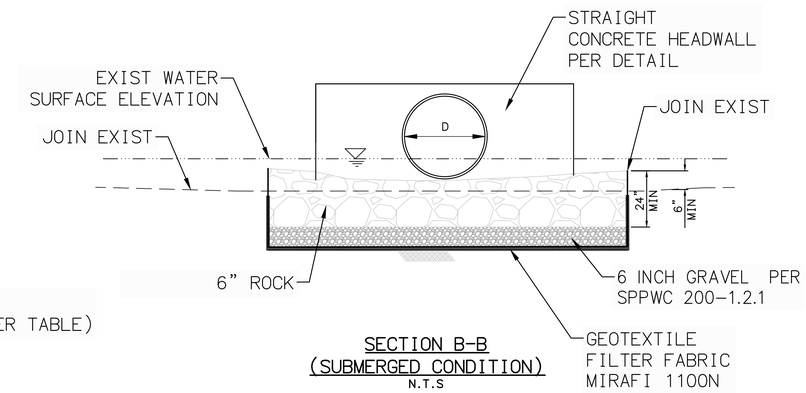
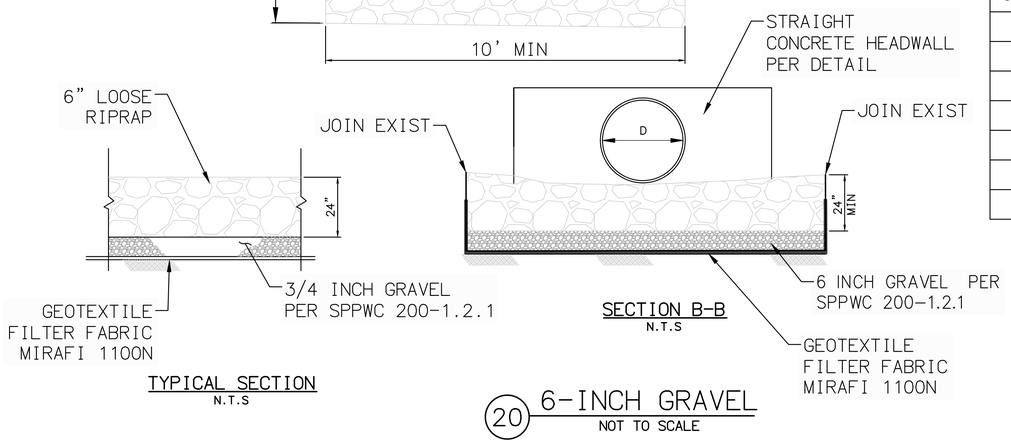




SECTION B-B
(SUBMERGED CONDITION)
N.T.S

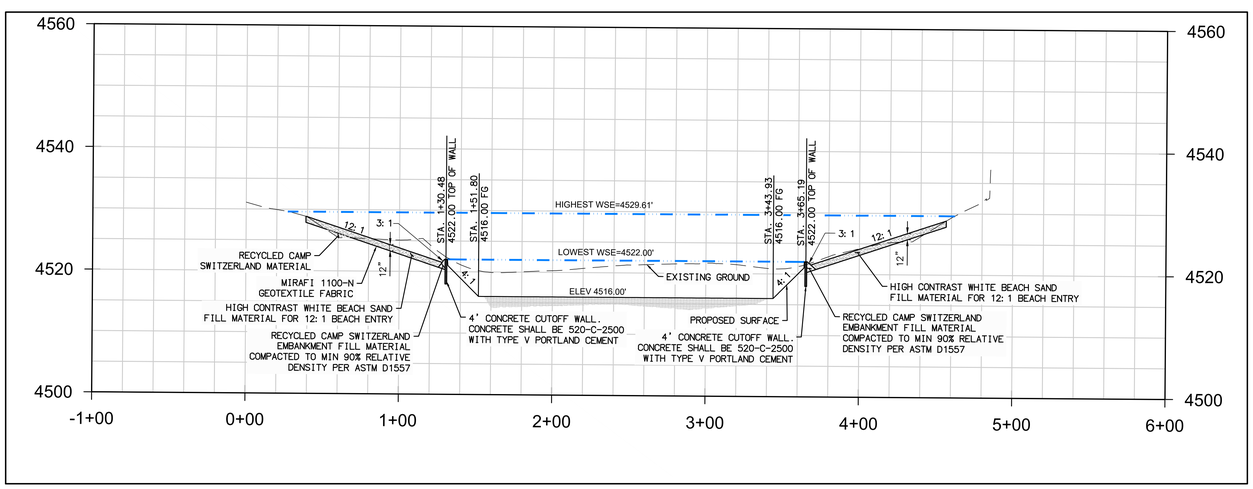
6-INCH ROCK GRADATION	
Sieve Size (Inches)	Percent Passing
6	100
5	80-100
4	50-85
3	20-60
2	10-30
1	0-10
0.5	0-5



TYPICAL SECTION
N.T.S

SECTION B-B
N.T.S

20 6-INCH GRAVEL
NOT TO SCALE



B SECTION B-B: LAKE CROSS SECTION
(SEE SHEET 5)
VERTICAL SCALE: 1"=4'

95% PROGRESS SET
NOT FOR CONSTRUCTION

UNDERGROUND SERVICE ALERT
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Call: TOLL FREE
1-800-227-2600
OR
811
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
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JS&TM
33161 Camino Capistrano, Suite D, San Juan Capistrano, CA 92675
Phone: (949) 329.3639 · JSTMINC.COM
JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	APPR.	DATE

PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

ASSISTANT DIRECTOR DATE

APPROVALS	INITIAL	DATE
PROJECT MANAGER		
OPS. DIVISION MANAGER		
PM. DIVISION MANAGER		

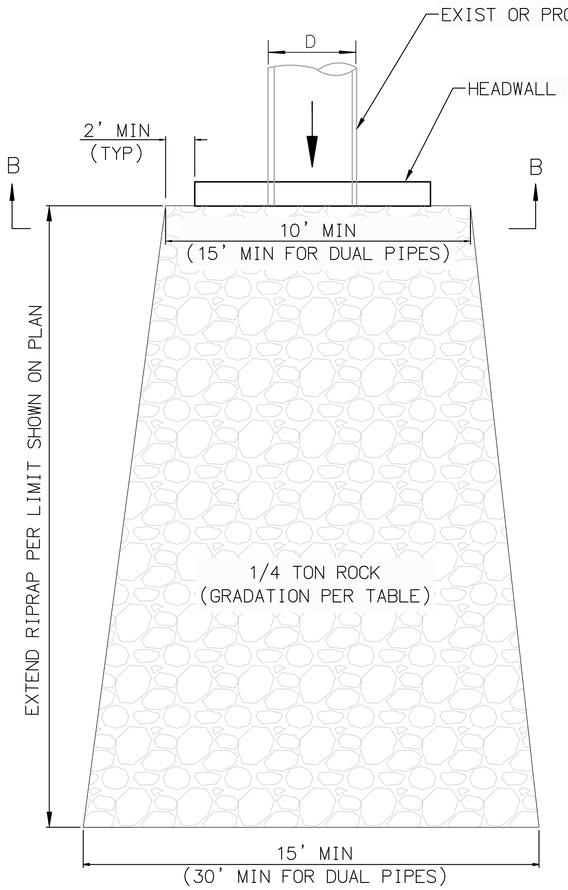
IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

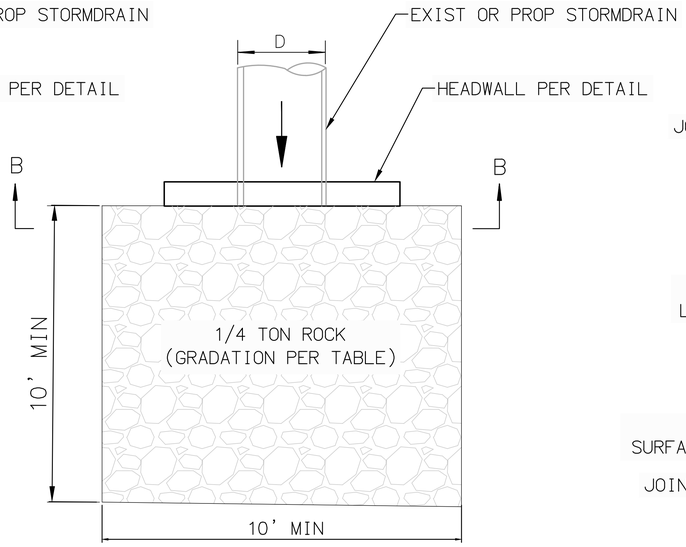
DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 14 OF 16

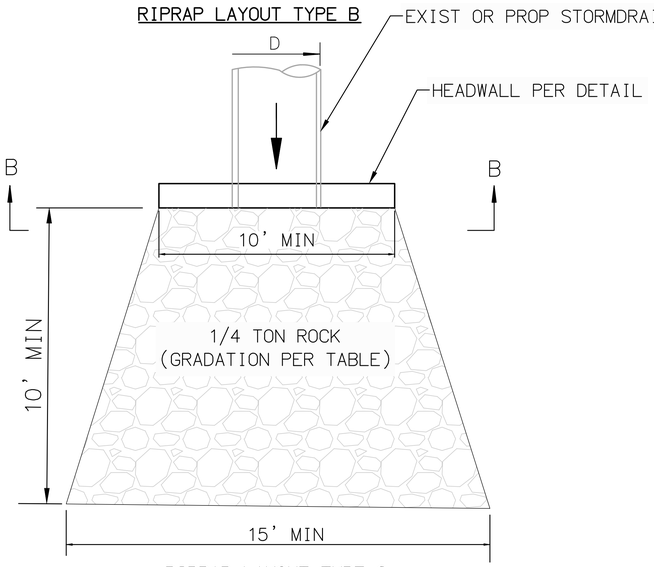
C:\Users\Muli Tim\J. Smith & T. Muli, Inc\Jonis Smith - JS&TM\Operations\Projects\1025 - Lake Gregory Sitewide Sediment Management Project\CAD\Grading Plan\1025-SHT-13-15_DETAILS.dwg 02/23/24 - 5:52pm Muli Tim



RIPRAP LAYOUT TYPE A

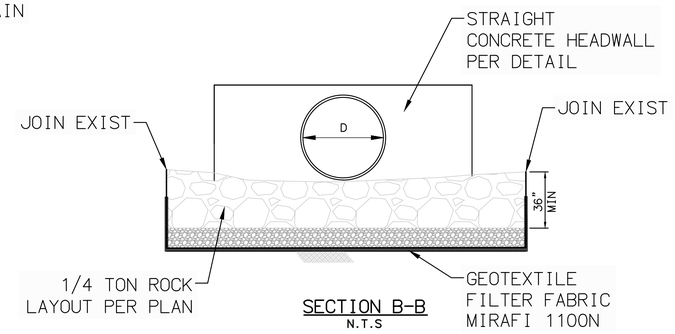


RIPRAP LAYOUT TYPE B

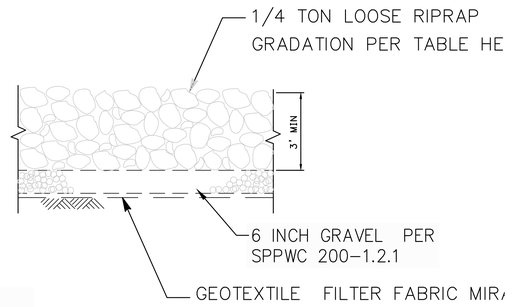


RIPRAP LAYOUT TYPE C

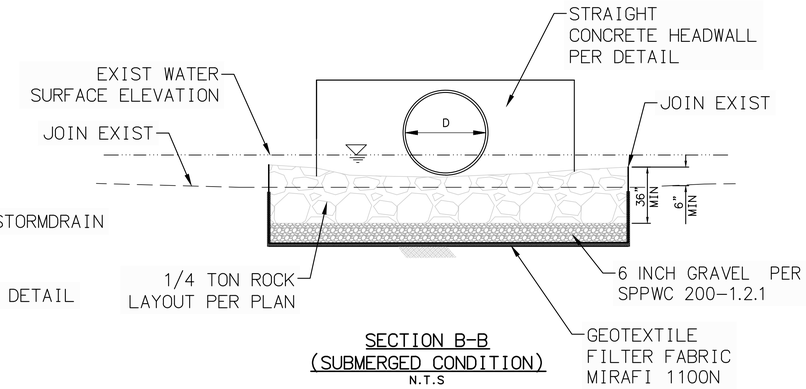
27 LOOSE RIPRAP
NOT TO SCALE



SECTION B-B
N.T.S



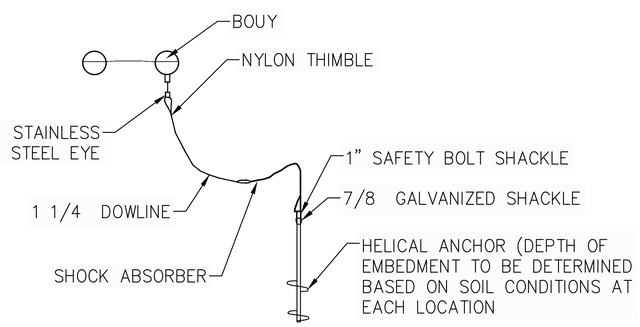
TYPICAL SECTION
N.T.S.



SECTION B-B
(SUBMERGED CONDITION)
N.T.S

1/4 TON ROCK GRADATION TABLE

WEIGHT	PERCENT LIGHTER THAN
1800#	100%
700	90 – 100
500	50 – 90
200	0 – 15



NOTES:
1. ANCHOR SYSTEMS MUST PROVIDE AT LEAST 500 POUNDS OF UPWARD LOAD PRESSURE
2. A ROCK-PENETRATING HELICAL EMBEDMENT ANCHOR (GALVANIZED STEEL) SHALL BE USED. ANCHOR SHALL BE EMBEDDED A MINIMUM OF 1' INTO ROCK SUBSTRATE.
3. MINIMUM ANCHOR LENGTH 5', MINIMUM HELICAL DISC SIZE 6", AND MINIMUM SHAFT DIAMETER OF 1-1/4"
4. THE ATTACHMENT EYE SHALL BE NO MORE THAN 6" ABOVE THE SUBSTRATE
5. EXTENSIONS MAY BE REQUIRED IN ORDER TO ACHIEVE 500 POUNDS OF RESISTING FORCE

30 BOUY LINE ANCHORAGE
NOT TO SCALE

95% PROGRESS SET
NOT FOR CONSTRUCTION

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OR
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JONIS C. SMITH 058654 09/08/2023
PROFESSIONAL ENGINEER R.C.E. No. DATE

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	OPS. DIVISION MANAGER		
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IMPROVEMENT PLANS

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 15 OF 16

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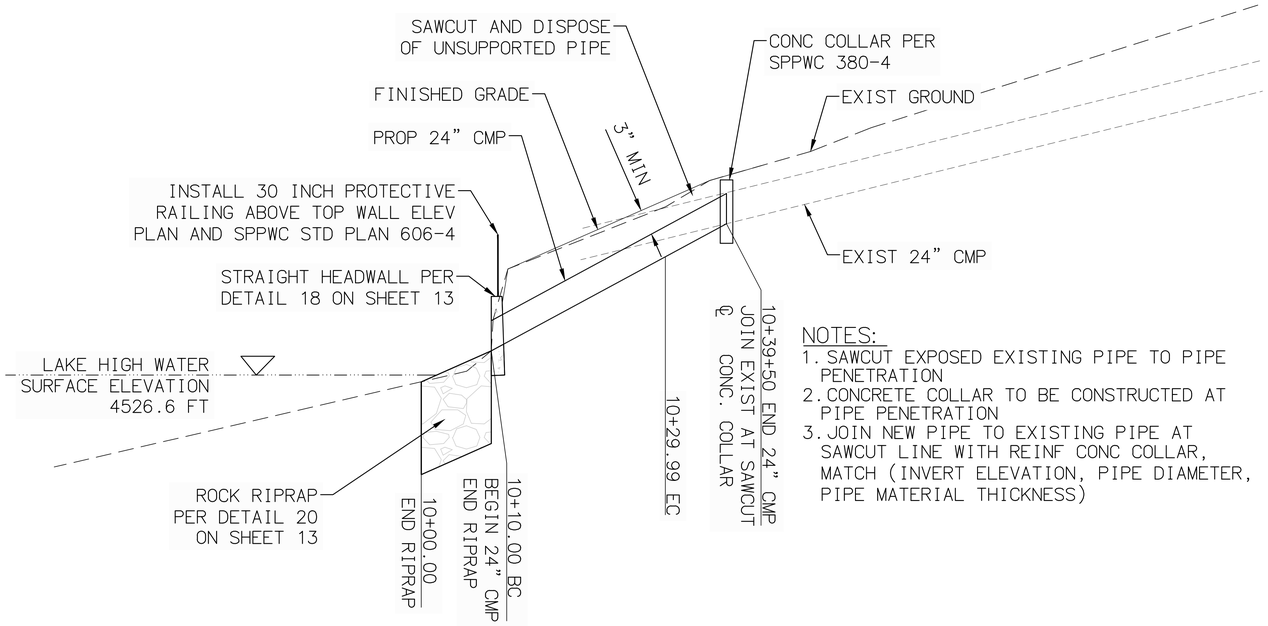
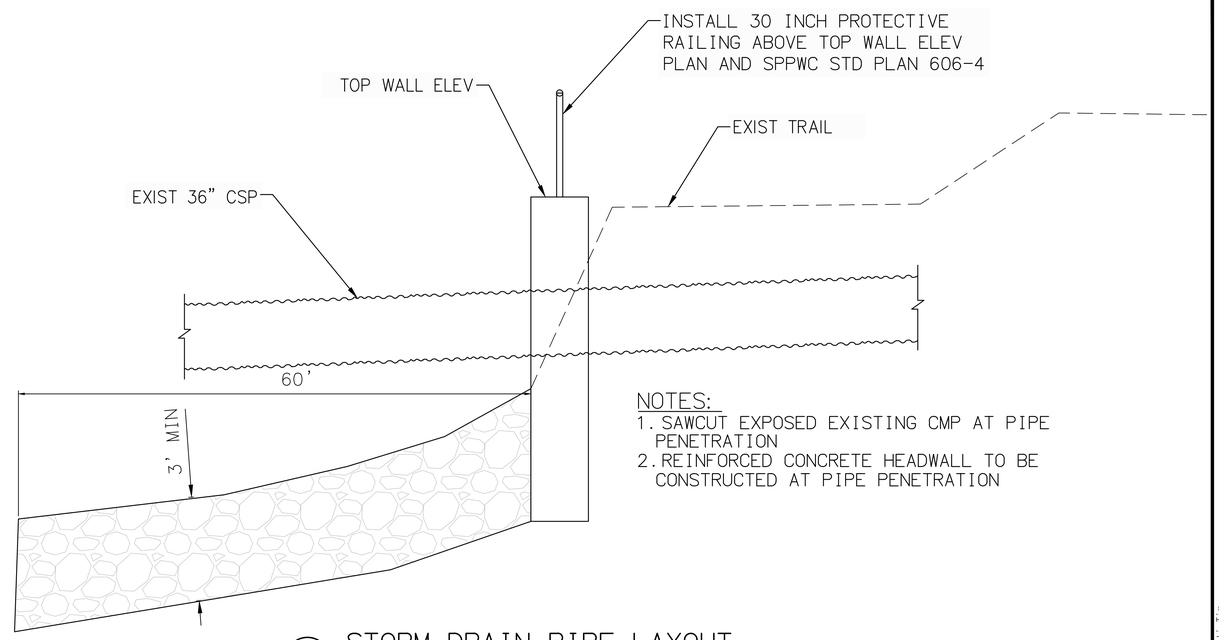


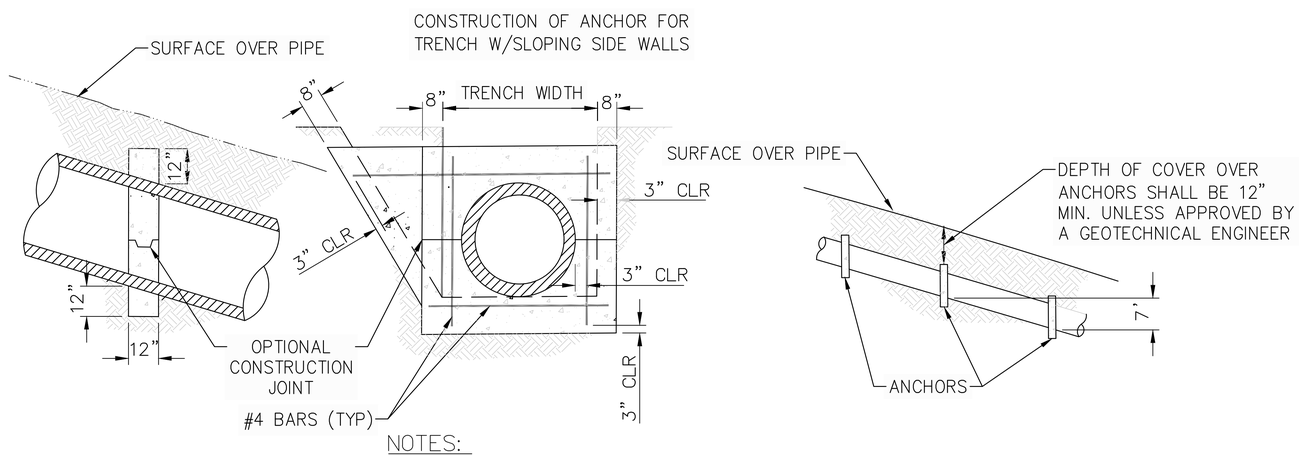
NOTES:
1. SAWCUT EXPOSED EXISTING PIPE TO PIPE PENETRATION
2. CONCRETE COLLAR TO BE CONSTRUCTED AT PIPE PENETRATION
3. JOIN NEW PIPE TO EXISTING PIPE AT SAWCUT LINE WITH REINF CONC COLLAR, MATCH (INVERT ELEVATION, PIPE DIAMETER, PIPE MATERIAL THICKNESS)

29 STORM DRAIN CONSTRUCTION DETAIL
NOT TO SCALE



NOTES:
1. SAWCUT EXPOSED EXISTING CMP AT PIPE PENETRATION
2. REINFORCED CONCRETE HEADWALL TO BE CONSTRUCTED AT PIPE PENETRATION

32 STORM DRAIN PIPE LAYOUT
NOT TO SCALE



NOTES:
1. PIPE ANCHORS SHALL BE CONSTRUCTED AT 7 FEET VERTICAL INTERVAL ON ALL SLOPES OF 5:1 OR STEEPER.
2. ALL REINFORCING STEEL SHALL BE #4 BARS
3. CONCRETE STRENGTH AND TYPE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 201-1.1.2 AND SECTION 201-1.1.3 OF THE GREENBOOK. IN ADDITION, PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF SECTION 201-1 OF THE GREENBOOK

31 CONCRETE SLOPE ANCHOR
NOT TO SCALE

NOTES:
1. SIGN SHALL BE PER CALIFORNIA HEALTH & SAFETY CODE, TITLE 3 OF SAN BERNARDINO COUNTY CODE AND GUIDELINES
2. POST SHALL BE PER SAN BERNARDINO COUNTY ROAD DEPARTMENT STD PLAN 303a AND INSTALLATION PER 303b
3. SIGN SHALL BE INSTALLED IN ACCORDANCE WITH SAN BERNARDINO COUNTY ROAD DEPARTMENT STANDARD PLAN 303

13 NO DIVING SIGN
NOT TO SCALE

95% PROGRESS SET
NOT FOR CONSTRUCTION

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1-800-227-2600
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811
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LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
SAN BERNARDINO COUNTY REGIONAL PARKS DEPARTMENT
CRESTLINE, CALIFORNIA

DETAILS

DWG NO. XX.XX.XXXX
FILE NO. XXX-XXX
SHEET 16 OF 16

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Lake Gregory Sediment Management Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Lake Gregory Sediment Management
Construction Start Date	9/3/2024
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	8.40
Location	24171 Lake Dr, Crestline, CA 92325, USA
County	San Bernardino-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5149
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

City Park	84.0	Acre	84.0	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.20	1.01	7.40	10.6	0.01	0.34	0.26	0.60	0.31	0.06	0.37	—	1,657	1,657	0.07	0.02	1.15	1,666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.9	10.8	89.6	99.6	0.28	3.55	4.45	8.01	3.22	1.03	4.26	—	34,355	34,355	2.05	1.74	0.64	34,927
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.28	1.78	14.7	16.3	0.05	0.58	0.73	1.31	0.53	0.17	0.70	—	5,635	5,635	0.34	0.29	1.75	5,731
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	0.32	2.69	2.97	0.01	0.11	0.13	0.24	0.10	0.03	0.13	—	933	933	0.06	0.05	0.29	949

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.20	1.01	7.40	10.6	0.01	0.34	0.26	0.60	0.31	0.06	0.37	—	1,657	1,657	0.07	0.02	1.15	1,666
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	13.9	10.8	89.6	99.6	0.28	3.55	4.45	8.01	3.22	1.03	4.26	—	34,355	34,355	2.05	1.74	0.64	34,927
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.28	1.78	14.7	16.3	0.05	0.58	0.73	1.31	0.53	0.17	0.70	—	5,635	5,635	0.34	0.29	1.75	5,731
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.42	0.32	2.69	2.97	0.01	0.11	0.13	0.24	0.10	0.03	0.13	—	933	933	0.06	0.05	0.29	949

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3. Construction Emissions Details

3.1. Temporary Inflatable Cofferdam Installation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.90	7.30	8.94	0.01	0.34	—	0.34	0.31	—	0.31	—	1,369	1,369	0.06	0.01	—	1,374
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.8
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.11	3.11	< 0.005	< 0.005	—	3.12
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Dewatering/Clearing&Grubbing (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.90	7.30	8.94	0.01	0.34	—	0.34	0.31	—	0.31	—	1,369	1,369	0.06	0.01	—	1,374
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.8

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.11	3.11	< 0.005	< 0.005	—	3.12
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Scarify and Dry/Dewater (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.90	7.30	8.94	0.01	0.34	—	0.34	0.31	—	0.31	—	1,369	1,369	0.06	0.01	—	1,374
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.8
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.11	3.11	< 0.005	< 0.005	—	3.12

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Clearing and Grubbing (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	0.90	7.30	8.94	0.01	0.34	—	0.34	0.31	—	0.31	—	1,369	1,369	0.06	0.01	—	1,374
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.8
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.11	3.11	< 0.005	< 0.005	—	3.12
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.69	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	288	288	0.01	0.01	1.15	292
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	11.4	9.58	72.0	80.0	0.21	3.13	—	3.13	2.88	—	2.88	—	22,740	22,740	0.92	0.18	—	22,818

Dust From Material Movement	—	—	—	—	—	—	0.84	0.84	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.87	1.57	11.8	13.1	0.03	0.51	—	0.51	0.47	—	0.47	—	3,738	3,738	0.15	0.03	—	3,751
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.16	2.40	0.01	0.09	—	0.09	0.09	—	0.09	—	619	619	0.03	0.01	—	621
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.37	0.43	4.79	0.00	0.00	0.98	0.98	0.00	0.23	0.23	—	990	990	0.05	0.04	0.11	1,002
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	1.23	0.19	12.0	6.47	0.06	0.18	2.46	2.64	0.12	0.67	0.79	—	9,362	9,362	1.03	1.51	0.51	9,837

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.83	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	165	165	0.01	0.01	0.31	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.20	0.03	1.99	1.06	0.01	0.03	0.40	0.43	0.02	0.11	0.13	—	1,539	1,539	0.17	0.25	1.39	1,618
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.05	27.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.01	0.36	0.19	< 0.005	0.01	0.07	0.08	< 0.005	0.02	0.02	—	255	255	0.03	0.04	0.23	268

3.11. Stormdrain Improvements (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.21	7.53	0.01	0.25	—	0.25	0.23	—	0.23	—	1,099	1,099	0.04	0.01	—	1,103
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.43	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	90.3	90.3	< 0.005	< 0.005	—	90.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.0	15.0	< 0.005	< 0.005	—	15.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.80	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	165	165	0.01	0.01	0.02	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.03	13.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	< 0.005	2.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Temporary Inflatable Cofferdam Installation	Site Preparation	9/2/2024	9/6/2024	5.00	5.00	—
Dewatering/Clearing&Grubbing	Site Preparation	9/9/2024	9/13/2024	5.00	5.00	—
Scarify and Dry/Dewater	Site Preparation	9/16/2024	9/20/2024	5.00	5.00	—
Clearing and Grubbing	Site Preparation	9/23/2024	9/27/2024	5.00	5.00	—
Grading	Grading	10/1/2024	12/23/2024	5.00	60.0	—
Stormdrain Improvements	Trenching	11/12/2024	12/23/2024	5.00	30.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Temporary Inflatable Cofferdam Installation	Pumps	Diesel	Average	4.00	8.00	11.0	0.74
Temporary Inflatable Cofferdam Installation	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Temporary Inflatable Cofferdam Installation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Dewatering/Clearing&Grubbing	Pumps	Diesel	Average	4.00	8.00	11.0	0.74
Dewatering/Clearing&Grubbing	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Dewatering/Clearing&Grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

Scarify and Dry/Dewater	Pumps	Diesel	Average	4.00	8.00	11.0	0.74
Scarify and Dry/Dewater	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Scarify and Dry/Dewater	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Clearing and Grubbing	Pumps	Diesel	Average	4.00	8.00	11.0	0.74
Clearing and Grubbing	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Clearing and Grubbing	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	6.00	8.00	148	0.41
Grading	Off-Highway Trucks	Diesel	Average	12.0	8.00	376	0.38
Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Rubber Tired Loaders	Diesel	Average	3.00	8.00	150	0.36
Grading	Skid Steer Loaders	Diesel	Average	2.00	8.00	71.0	0.37
Grading	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Stormdrain Improvements	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Stormdrain Improvements	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Stormdrain Improvements	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Temporary Inflatable Cofferdam Installation	—	—	—	—
Temporary Inflatable Cofferdam Installation	Worker	20.0	18.5	LDA,LDT1,LDT2
Temporary Inflatable Cofferdam Installation	Vendor	—	10.2	HHDT,MHDT
Temporary Inflatable Cofferdam Installation	Hauling	0.00	20.0	HHDT
Temporary Inflatable Cofferdam Installation	Onsite truck	—	—	HHDT
Dewatering/Clearing&Grubbing	—	—	—	—
Dewatering/Clearing&Grubbing	Worker	20.0	18.5	LDA,LDT1,LDT2
Dewatering/Clearing&Grubbing	Vendor	—	10.2	HHDT,MHDT
Dewatering/Clearing&Grubbing	Hauling	0.00	20.0	HHDT
Dewatering/Clearing&Grubbing	Onsite truck	—	—	HHDT
Scarify and Dry/Dewater	—	—	—	—
Scarify and Dry/Dewater	Worker	20.0	18.5	LDA,LDT1,LDT2
Scarify and Dry/Dewater	Vendor	—	10.2	HHDT,MHDT
Scarify and Dry/Dewater	Hauling	0.00	20.0	HHDT
Scarify and Dry/Dewater	Onsite truck	—	—	HHDT
Clearing and Grubbing	—	—	—	—
Clearing and Grubbing	Worker	20.0	18.5	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	—	10.2	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00	20.0	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	75.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT

Grading	Hauling	133	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Stormdrain Improvements	—	—	—	—
Stormdrain Improvements	Worker	12.5	18.5	LDA,LDT1,LDT2
Stormdrain Improvements	Vendor	—	10.2	HHDT,MHDT
Stormdrain Improvements	Hauling	0.00	20.0	HHDT
Stormdrain Improvements	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Temporary Inflatable Cofferdam Installation	—	—	0.00	0.00	—
Dewatering/Clearing&Grubbing	—	—	0.00	0.00	—
Scarify and Dry/Dewater	—	—	0.00	0.00	—

Clearing and Grubbing	—	—	0.00	0.00	—
Grading	4,312	59,496	180	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
City Park	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.8	annual days of extreme heat

Extreme Precipitation	13.8	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	38.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	100
AQ-PM	42.0
AQ-DPM	11.6
Drinking Water	38.2
Lead Risk Housing	73.0
Pesticides	0.00

Toxic Releases	46.7
Traffic	1.26
Effect Indicators	—
CleanUp Sites	5.64
Groundwater	0.00
Haz Waste Facilities/Generators	1.80
Impaired Water Bodies	23.9
Solid Waste	55.5
Sensitive Population	—
Asthma	90.5
Cardio-vascular	98.3
Low Birth Weights	33.0
Socioeconomic Factor Indicators	—
Education	32.6
Housing	70.2
Linguistic	0.00
Poverty	55.7
Unemployment	25.2

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	26.35698704
Employed	4.914667009
Median HI	26.62645964
Education	—

Bachelor's or higher	31.19466188
High school enrollment	2.438085461
Preschool enrollment	55.49852432
Transportation	—
Auto Access	71.35891184
Active commuting	79.25060952
Social	—
2-parent households	23.23880405
Voting	68.26639292
Neighborhood	—
Alcohol availability	43.10278455
Park access	81.35506224
Retail density	30.05261132
Supermarket access	56.52508662
Tree canopy	94.75170024
Housing	—
Homeownership	65.25086616
Housing habitability	80.70062877
Low-inc homeowner severe housing cost burden	48.76170923
Low-inc renter severe housing cost burden	78.59617606
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	34.04337226
Arthritis	0.0
Asthma ER Admissions	5.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	19.7
Cognitively Disabled	21.0
Physically Disabled	22.7
Heart Attack ER Admissions	5.5
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	94.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	99.3
SLR Inundation Area	0.0
Children	53.3
Elderly	15.4
English Speaking	72.3
Foreign-born	5.9
Outdoor Workers	51.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	96.9
Traffic Density	1.9
Traffic Access	23.0
Other Indices	—
Hardship	62.6
Other Decision Support	—
2016 Voting	76.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	43.0
Healthy Places Index Score for Project Location (b)	23.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Construction: Construction Phases	Per questionnaire
Construction: Off-Road Equipment	Per questionnaire
Operations: Vehicle Data	No operational emissions
Operations: Solid Waste	No operational emissions
Construction: Dust From Material Movement	Soil import/export during grading phase

Lake Gregory Regional Park Sitewide Sediment Management Project **Energy Calculations**

Construction On-Site (Off-Road) Fuel Consumption

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Fuel Consumption Rate (gallon/hour)[1]	Duration (total hours/day)	# days	Total Fuel Consumption (gallon)
Temporary Inflatable Cofferdam Installation	Pumps	4	8	11	0.74	0.33	32	5	52.10
Temporary Inflatable Cofferdam Installation	Sweepers/Scrubbers	1	8	36	0.46	0.66	8	5	26.50
Temporary Inflatable Cofferdam Installation	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	5	149.18
Dewatering/Clearing&Grubbing	Pumps	4	8	11	0.74	0.33	32	5	52.10
Dewatering/Clearing&Grubbing	Sweepers/Scrubbers	1	8	36	0.46	0.66	8	5	26.50
Dewatering/Clearing&Grubbing	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	5	149.18
Scarify and Dry/Dewater	Pumps	4	8	11	0.74	0.33	32	5	52.10
Scarify and Dry/Dewater	Sweepers/Scrubbers	1	8	36	0.46	0.66	8	5	26.50
Scarify and Dry/Dewater	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	5	149.18
Clearing and Grubbing	Pumps	4	8	11	0.74	0.33	32	5	52.10
Clearing and Grubbing	Sweepers/Scrubbers	1	8	36	0.46	0.66	8	5	26.50
Clearing and Grubbing	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	5	149.18
Grading	Cement and Mortar Mixers	1	8	10	0.56	0.22	8	60	107.52
Grading	Excavators	1	8	36	0.38	0.55	8	60	262.66
Grading	Graders	6	8	148	0.41	2.43	48	60	6,990.34
Grading	Off-Highway Trucks	12	8	376	0.38	5.72	96	60	32,919.55
Grading	Rollers	1	8	36	0.38	0.55	8	60	262.66
Grading	Rubber Tired Loaders	3	8	150	0.36	2.16	24	60	3,110.40
Grading	Skid Steer Loaders	2	8	71	0.37	1.05	16	60	1,008.77
Grading	Sweepers/Scrubbers	1	8	36	0.46	0.66	8	60	317.95
Grading	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	60	1,790.21
Stormdrain Improvements	Cement and Mortar Mixers	1	8	10	0.56	0.22	8	30	53.76
Stormdrain Improvements	Sweepers/Scrubbers	1	8	36	0.46	0.66	8	30	158.98
Stormdrain Improvements	Tractors/Loaders/Backhoes	3	8	84	0.37	1.24	24	30	895.10
							Total Construction Off-Road Fuel Consumption (gallon)		***48,788.99***
							Countywide Off-Road Fuel Consumption (2024) (gallon)[2]		***18,336,278.40***
							Percentage Increase Countywide		***0.2661%***

Notes:

1. Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor

Where:

Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.

2. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Lake Gregory Regional Park Sitewide Sediment Management Project **Energy Calculations**

Constrution Mobile (On-Road) Fuel Consumption

WORKER TRIPS

Phase	Phase Length (# days)	# Worker Trips	Worker Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)[1]	Total Fuel Consumption (gallon)
Temporary Inflatable Cofferdam Installati	5	20	18.5	1,850		74.29
Dewatering/Clearing&Grubbing	5	20	18.5	1,850		74.29
Scarify and Dry/Dewater	5	20	18.5	1,850	**24.90284233**	74.29
Clearing and Grubbing	5	20	18.5	1,850		74.29
Grading	60	75	18.5	83,250		3,342.99
Stormdrain Improvements	30	12.5	18.5	6,938		278.58
					Worker Trips Total	*3,918.73*

VENDOR TRIPS

Phase	Phase Length (# days)	# Vendor Trips	Vendor Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)[1]	Total Fuel Consumption (gallon)
Temporary Inflatable Cofferdam Installati	5	0	10.2	0		0.00
Dewatering/Clearing&Grubbing	5	0	10.2	0		0.00
Scarify and Dry/Dewater	5	0	10.2	0	**8.343886151**	0.00
Clearing and Grubbing	5	0	10.2	0		0.00
Grading	60	0	10.2	0		0.00
Stormdrain Improvements	30	0	10.2	0		0.00
					Vendor Trips Total	*0.00*

HAULING TRIPS

Phase	Phase Length (# days)	# Hauling Trips	Hauling Trip Length	Total VMT	Fuel Consumption Factor (Miles/Gallon/Day)[1]	Total Fuel Consumption (gallon)
Temporary Inflatable Cofferdam Installati	5	0	20	0		0.00
Dewatering/Clearing&Grubbing	5	0	20	0		0.00
Scarify and Dry/Dewater	5	0	20	0	**8.343886151**	0.00
Clearing and Grubbing	5	0	20	0		0.00
Grading	60	133	20	159,600		19,127.78
Stormdrain Improvements	30	0	20	0		0.00
					Hauling Trips Total	*19,127.78*
					Total Construction On-Road (Automotive) Fuel Consumption (gallon)	***23,046.51***
					Countywide On-Road Fuel Consumption (2024) (gallon) [1]	***1,127,753,071***
					Percentage Increase Countywide	***0.0020%***

Notes:

1. Countywide operational fuel consumption, off-road construction equipment diesel fuel consumption, and on-road fuel consumption are from CARB EMFAC2021.

Source: Refer to CalEEMod outputs for assumptions used in this analysis.

Appendix C – Biological Resources Assessment

Biological Resources Technical Report

Lake Gregory Regional Park

Sitewide Sediment Management Project

Crestline, California

March 4, 2024

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MBI JN 195651

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Appendix A: Plant and Wildlife Species Observed List
Appendix B: Potentially Occurring Special-Status Biological Resources
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1.0 INTRODUCTION

1.1 Background and Purpose

This report contains the findings of Michael Baker International's (Michael Baker) biological resources assessment for the approximately 132-acre Lake Gregory Regional Park Sitewide Sediment Management Project (project or project site) located in the unincorporated community of Crestline, San Bernardino County (County), California. The 132-acre project site includes Lake Gregory, all inlets and outlets, all proposed project features, and an approximate 100-foot buffer to ensure a comprehensive analysis was conducted. Michael Baker biologists conducted a literature review and field surveys in 2023 to characterize existing site conditions and assess the potential for special-status biological resources to occur within the project site that could pose a constraint to implementation of the proposed project. The submittal of this report is intended to satisfy the biological resource needs of the CEQA process. The County of San Bernardino, Department of Public Works-Special Districts is requesting administrative and discretionary action to approve the implementation of a sediment management project.

1.2 Project Description

The proposed project includes both the construction of improvements and routine maintenance elements. The construction of various improvements is necessary to improve recreational features and infrastructure supporting Lake Gregory Regional Park, primarily for water quality, recreational purposes, and public safety.

The construction of improvements includes the following actions:

- Improvement to the Swim Beach area including dredging, regrading, and placement of a permanent in-water barrier.
- Improvements to South Beach including dredging and regrading.
- Improvement to the majority of lake inlet locations along the lake perimeter with the addition of headwall structures and rip rap at some locations.
- Re-construction and enhancement of an ephemeral channel (San Moritz Channel Basins).

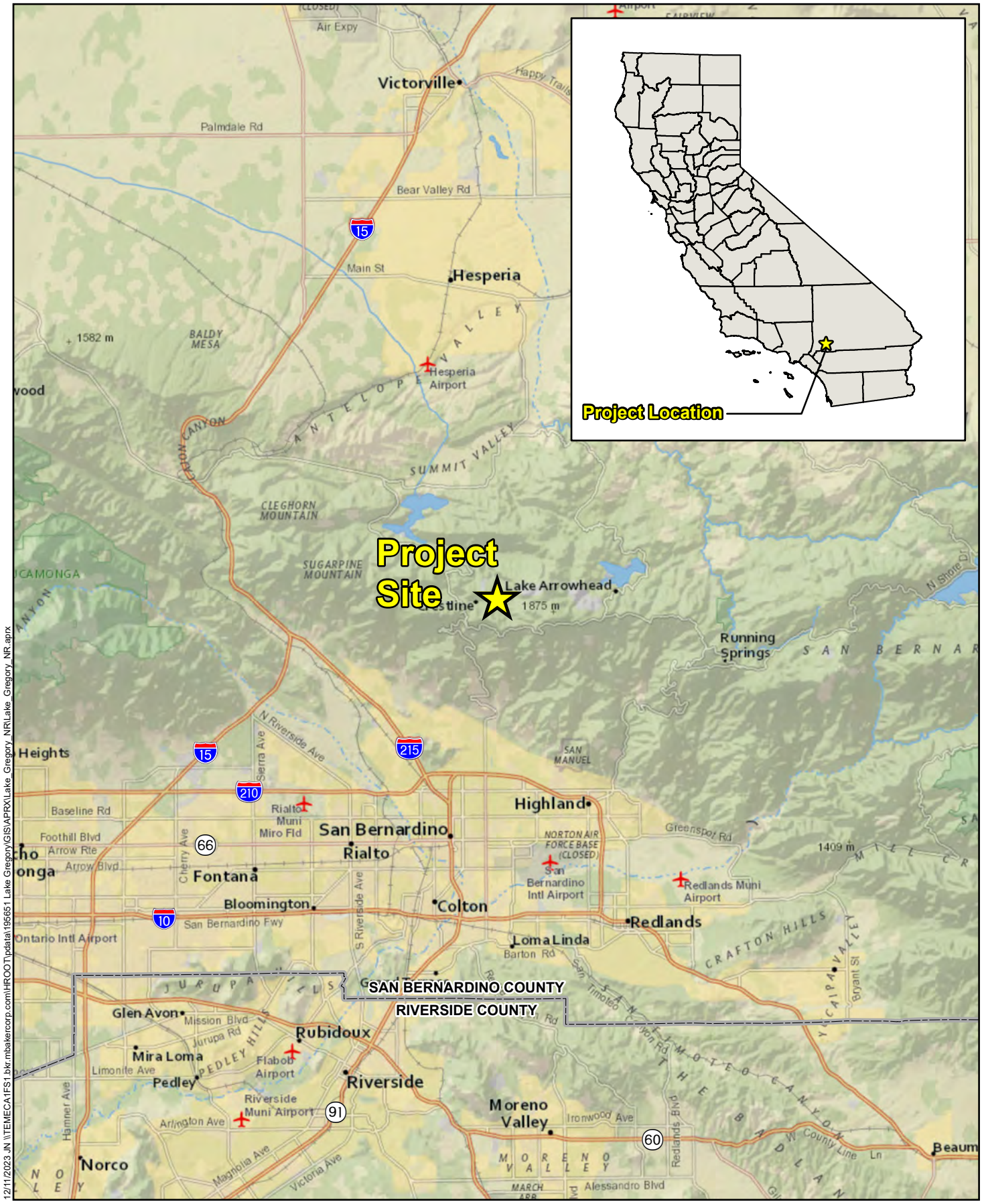
Maintenance includes the following actions:

- On-going sediment management and removal of existing and future sediment accumulation.
- Routine maintenance of Lake Gregory, San Moritz Channel Basins, and Library Basin, including Lake Gregory beach grading, lake and basin structural repairs and debris/trash removal, inlet/outlet repairs, access road and appurtenant structure repairs, slope repairs, maintenance of lake water surface/water quality operational standards, and vector control.

1.3 Project Site Location

Lake Gregory is located at 24171 Lake Drive in the unincorporated community of Crestline, San Bernardino County, California (Figure 1, *Regional Vicinity*). Specifically, the project site is within Section 23 of

Township 2 South, Range 4 West of the U.S. Geological Survey's (USGS) San Bernardino North, California 7.5-minute topographic quadrangle, east of Highway 138 and north of Highway 18 (Figure 2, *Project Vicinity*). The project site is generally bounded by Lake Drive to the north and San Moritz Drive to the south (Figure 3, *Project Site*).



12/11/2023 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\1956651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Regional Vicinity

Michael Baker INTERNATIONAL

0 2.5 5 Miles

Source: ArcGIS Online, 2018

Figure 1

12/11/2023 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

Project Site

Michael Baker INTERNATIONAL

0 0.5 1 Miles

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Project Vicinity

Source: USGS 7.5-Minute topographic quadrangle maps: *Harrison Mountain, Lake Arrowhead, San Bernardino North, and Silverwood Lake, California (2021)*

Figure 2

12/11/2023 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

Project Site

Reference Point

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Project Site

Figure 3

2.0 METHODS

2.1 Literature Review

Prior to conducting the field surveys, Michael Baker conducted a literature review and records search to determine which special-status biological resources potentially occur on or within the vicinity of the project site. This effort helped to develop a baseline from which to inventory the existing biological resources and evaluate the suitability of the project site to support special-status biological resources.

Special-status plant and wildlife occurrence records obtained during the literature review from the USGS Cajon, Devore, Harrison Mountain, Lake Arrowhead, San Bernardino North, and Silverwood Lake, California 7.5-minute quadrangle maps were identified through a query of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database RareFind 5 (CNDDB, CDFW 2023a), California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants of California (CIRP, CNPS 2023), Calflora database (Calflora 2023), and for the project region the U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation environmental review tool (IPaC, USFWS 2023a).

The current regulatory/conservation status of special-status plant and wildlife species was verified through lists and resources provided by CDFW, specifically the Special Animals List (CDFW 2023b), State and Federally Listed Endangered and Threatened Animals of California (CDFW 2023c), Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2023d), and State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2023e). USFWS-designated Critical Habitat for species listed under the federal Endangered Species Act (FESA) was reviewed online via the Critical Habitat Mapper (USFWS 2023b).

Standard field guides, texts, and other sources were used, for example species accounts provided by The Sibley Guide to Birds (Sibley 2014) and Cornell Lab of Ornithology's eBird Database (eBird 2023) for birds. In addition, Michael Baker reviewed available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site to understand existing site conditions, confirm previous species observations, and note the extent of any disturbances that have occurred in the project site that would otherwise limit the distribution of special-status biological resources. A report by Dudek summarizing results of a database search and field survey conducted in April 2019 was reviewed and is referenced in further sections of this report (Dudek 2019). Biological reports previously prepared by Michael Baker for projects in the general area of the unincorporated community of Crestline were also reviewed. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources. Aerial photography was also reviewed prior to the field survey to locate potential natural corridors and linkages that may support wildlife movement through the area.

On-site and adjoining soils were researched prior to conducting the habitat assessment using the United States Department of Agriculture (USDA) Custom Soil Resource Report for San Bernardino National Forest

Area, California (USDA 2023). In addition, a review of the local geological conditions and historical aerial photographs (Google, Inc. 2023) was conducted to assess the ecological changes and disturbances that may have occurred within the project site, as well as the probability of local wetland presence through the National Wetlands Inventory Mapper (USFWS 2023c).

The References section at the end of this document provides a complete list of technical references that were reviewed by Michael Baker.

2.2 Field Investigations

Michael Baker biologists Anna Jullie and John Parent conducted a biological field survey/habitat assessment on September 20, 2023, to document existing conditions and assess the potential for special-status biological resources to occur within or adjacent to the boundaries of the project site. The field survey was conducted in accordance with applicable protocols and in a way to maximize the detectability of special-status species that may be present within the project site during the time of the survey. No limitations or restrictions on direct access to the project site were encountered by Michael Baker during the field survey. Parcels surrounding the project site were scanned with binoculars from public rights-of-way. Table 1, *Survey Dates, Timing, Surveyors, and Weather Conditions*, provides a summary of the survey details.

Table 1: Survey Dates, Timing, Surveyors, and Weather Conditions

Date	Purpose	Surveyors*	Time (start/end)	Temperature (°F) (start/end)	Wind Speed (mph) (start/end)
September 20, 2023	General biological survey and habitat assessment	AJ, JP	0800 / 1200	53 partly cloudy / 61 partly cloudy	1-3 / 0
October 12, 2023	Aquatic Resources Delineation	JP, SA	0800 / 1300	48 clear / 72 clear	0 / 1-2

*AP=Anna Jullie, JP=John Parent, SA=Stephen Anderson

2.2.1 Vegetation Community and Land Cover Mapping

Vegetation communities preliminarily identified on aerial photographs during the literature review were verified in the field by walking meandering transects throughout the project site. Naturally vegetated areas typically have a higher potential to support special-status plant and wildlife species than areas that are highly disturbed or developed, which have lower quality and/or reduced amounts of suitable habitat for plants and wildlife. Plant and wildlife species observed during the field survey conducted by Michael Baker across the project site, as well as dominant plant species within each vegetation community, were recorded in a field notebook. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, and the overall condition of on-site vegetation communities were recorded.

Vegetation communities occurring within the project site were delineated on an aerial photograph during the field survey and later digitized using the ArcMap Geographic Information System (GIS) software to quantify the area of each vegetation community in acres. Vegetation communities and land cover types occurring within the project site were classified in accordance with descriptions provided in the Manual of California Vegetation (Sawyer et al. 2009).

2.2.2 General Plant Inventory

Plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unfamiliar plants were photographed in the field and later identified in the laboratory using taxonomic guides. Plant nomenclature used in this report follows the Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only). Plant species detected are included in Appendix A, *Plant and Wildlife Species Observed List*.

2.2.3 Special-Status Plant Surveys

Sixty-four special-status plant species were identified within the region during reviews of the CNDDB, CIRP, and IPaC. Each species' special-status ranking, preferred habitats, and potential to occur within the project site are detailed in Appendix B, *Potentially Occurring Special-Status Biological Resources*. Of the 64 species reported in the region, 31 have a low potential to occur due to the presence of coniferous forest and limited riparian habitat. However, due to current land use and ongoing anthropogenic disturbance within the project site, the potential is limited. Focused special-status plant surveys were not conducted because the visit dates are outside of the blooming period of most of the species.

2.2.4 General Wildlife Inventory

Wildlife species detected during the field survey by sight, calls, tracks, scat, or other types of evidence were recorded in a field notebook. Field guides used to assist with identification of species during the habitat assessment included The Sibley Guide to Birds (Sibley 2014) for birds, A Field Guide to Western Reptiles and Amphibians (Stebbins 2003) for herpetofauna, and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names of wildlife species in this report (first reference only). To the extent possible, nomenclature of birds follows the most recent annual supplement of the American Ornithological Society's Checklist of North American Birds (Chesser et al. 2023), nomenclature of amphibians and reptiles follows Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding (Crother 2017), and nomenclature for mammals follows the Bats of the United States and Canada (Harvey et al. 2011) and Revised Checklist of North American Mammals North of Mexico (Bradley et al. 2014). When not available in the references listed above, habitat and other life history attributes were obtained from Terrestrial Mammal Species of Special Concern in California (Bolster 1998) for mammals and NatureServe Explorer (NatureServe 2023) for all taxonomic groups.

2.2.5 Special-Status Wildlife Surveys

Fifty-one special-status wildlife species were identified during reviews of the CNDDB and IPaC. Each species' special-status ranking, preferred habitats, and potential to occur within the project site are provided in Appendix B, *Potentially Occurring Special-Status Biological Resources*. The literature review and habitat assessment conducted did not result in the need to conduct focused surveys for special-status wildlife species. Wildlife species detected were recorded in field notes and provided in Appendix A, *Plant and Wildlife Species Observed List*.

2.2.6 Aquatic Resources Delineation

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (USACE) Regulatory Branch regulates discharge of dredged or fill material into "waters of the United States" pursuant to Section 404 of the federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the state agencies, the Regional Water Quality Control Board (RWQCB) regulates discharge to surface waters pursuant to Section 401 of the CWA and Section 13263 of the California Porter-Cologne Water Quality Control Act, and CDFW regulates alterations to streambed and associated vegetation communities under Section 1600 et seq. of the California Fish and Game Code (CFGC).

Michael Baker qualified wetland delineators John Parent and Stephen Anderson conducted an aquatic resources delineation for the proposed project on October 12, 2023, to identify and map the extent of waters of the U.S. (WoUS), including potential wetlands, and waters of the State (WoS) within the boundaries of the project site. During the field delineation, Michael Baker utilized the methods outlined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (USACE 2008) to document the presence and extent of jurisdictional features that would fall under the regulatory authority of the USACE, RWQCB, and CDFW. The results of Michael Baker's jurisdictional delineation are provided within the Lake Gregory Regional Park Sitewide Sediment Management Project Aquatics Resources Delineation Report (Michael Baker 2024), prepared under separate cover, and are summarized in Section 3.6.5 of this report.

2.2.7 Survey Limitations

As stated previously in Section 2.2.3, surveys conducted by Michael Baker to support this report and analysis were conducted in September and October, which is outside of the blooming period of special-status plant species potentially occurring within the project site.

2.3 Regional Connectivity/Wildlife Movement

The analysis of wildlife movement corridors associated with the project site and its immediate vicinity is based on information compiled from the literature, analysis of aerial photographs and topographic maps, and direct observations made in the field during survey work. The relationship of the study area to large open space areas in the immediate vicinity was also evaluated in terms of connectivity and habitat linkages. Relative to corridor issues, the discussions in this report are intended to focus on wildlife movement associated with the project site and immediate vicinity.

The focus of this analysis is to determine if the alteration of current land use on the project site will have significant impacts to regional wildlife movement. This study did not include a field component (e.g., the use of track plates, camera stations, scent stations, or snares). Instead, notation was made during site visits of the locations of animal sign to determine the species potentially utilizing the project site. The results of the literature review and site visits were used to draw conclusions about the wildlife potentially utilizing the project site and vicinity.

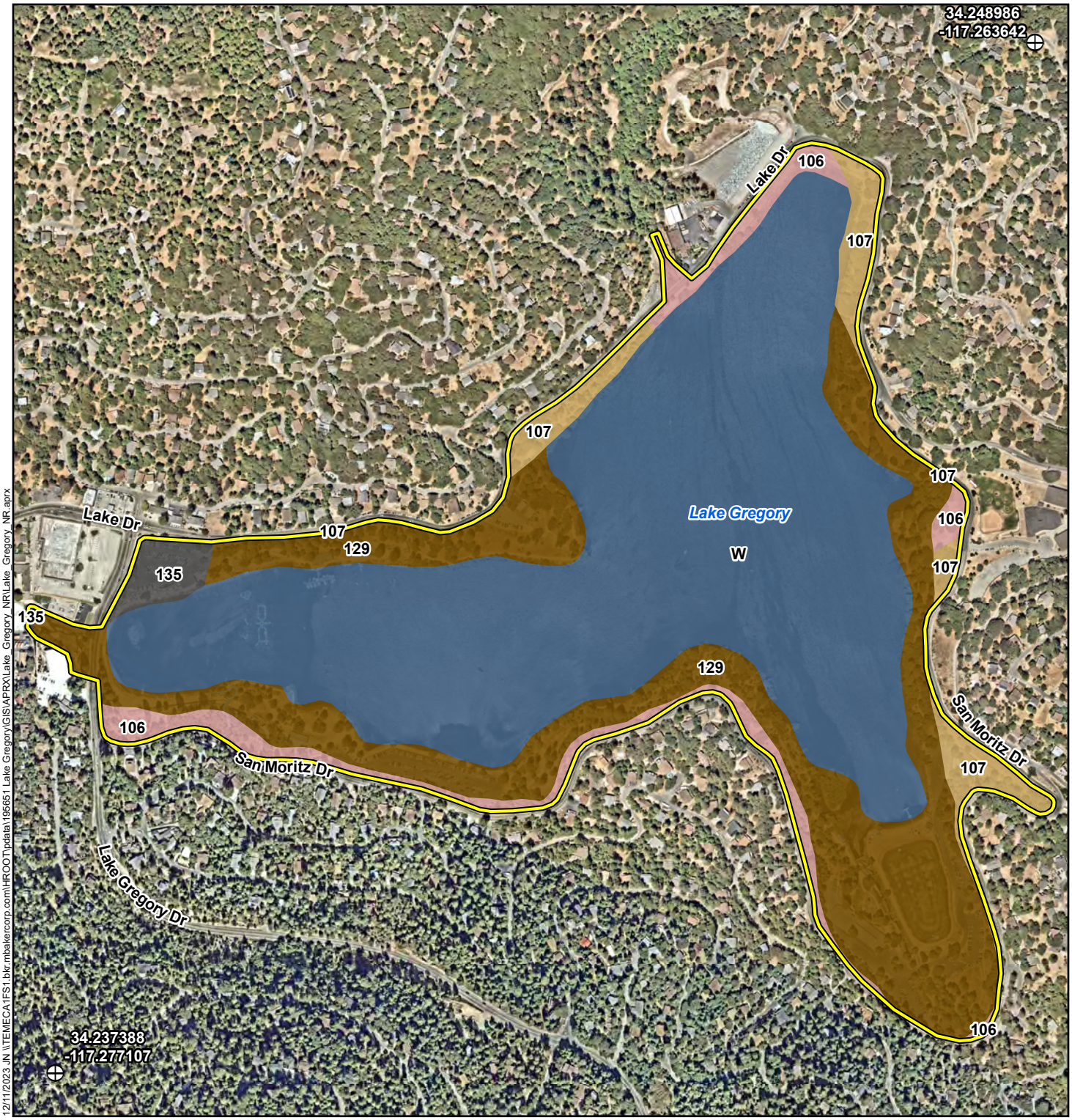
3.0 RESULTS

3.1 Characteristics of the Site and Surrounding Area

The project site is located within the unincorporated community of Crestline in San Bernardino County, north of San Moritz Drive, east of Lake Gregory Drive, south of Lake Drive, and west of San Moritz Way. The project site is approximately 132 acres and is mainly comprised of open water (Lake Gregory), urban developed areas, ornamental non-natural habitat types, and a disturbed mixed conifer natural vegetation community. Based on a review of Google Earth historical aerial imagery, with the exception of fluctuating lake levels, there has been no substantial change within the project site since 1994 (Google, Inc. 2023). Representative photographs taken throughout the project site are included in Appendix C, *Site Photographs*. Land uses surrounding the project site in all directions consist of urban developed residences and commercial businesses, with undisturbed mixed coniferous forest further to the north and east of the project site.

3.2 Topography and Soils

The project site is concave, sloping downward from all directions towards the lake surface. On-site elevation ranges from approximately 4,520 to 4,800 feet above mean sea level (amsl). According to the Custom Soil Resource Report for San Bernardino National Forest Area, California (USDA 2023), the project site is underlain by Cedarpines-Stargazer-Urban land complex soils (107), Grunney-Shayroad complex soils (129), and water. The Cedarpines-Stargazer soil complex is well drained with a soil profile of cobbly sandy loam or cobbly sand soils. The Grunney-Shayroad soil complex is poorly drained with a soil profile of sandy loam soils. Refer to Figure 4, *USDA Soils*, for a depiction of soil units within the project site.



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Legend

- Project Site
- Reference Point
- 106 Cedarpines-Stargazer-Urban land complex, 15 to 30 percent slopes
- 107 Cedarpines-Stargazer-Urban land complex, 30 to 50 percent slopes
- 129 Grunney-Shayroad complex, 4 to 9 percent slopes
- 135 Urban land
- W Water areas

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023), USDA (09/2019)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

USDA Soils

Figure 4

3.3 Vegetation Communities and Land Cover Types

Two natural vegetation communities, disturbed mixed conifer forest *Pinus ponderosa-Calocedrus decurrens* alliance and red willow thicket (*Salix laevigata*) alliance, were observed and mapped within the boundaries of the project site. In addition, the project site contains six land cover types classified as disturbed/non-natural. These vegetation communities and land cover types are depicted on Figure 5, *Vegetation Communities and Land Cover Types*, summarized in Table 2*, Vegetation Communities and Land Cover Type*s, and described in further detail below. The discussion of each native vegetation community provides a typical description of the vegetation community in the first paragraph and a description of the vegetation community specific to the project site in the second paragraph. Refer to Appendix A, *Plant and Wildlife Species Observed List*, for a complete list of plant species observed within the project site during the field surveys conducted by Michael Baker.

Table 2: Vegetation Communities and Land Cover Types

Vegetation Community/Land Cover Type	Acres
Disturbed Mixed Conifer Forest *Pinus ponderosa-Calocedrus decurrens* Alliance	17.59
Red Willow Thicket *Salix laevigata* Association	0.58
Beach	2.47
Non-vegetated channel/Floodway	0.62
Open Water	80.13
Ornamental	18.77
Urban/Developed	10.83
Detention Basin	0.67
Total	**131.66**

3.3.1 Disturbed Mixed Conifer Forest (*Pinus ponderosa-Calocedrus decurrens*) Alliance

Mixed conifer forest (*Pinus ponderosa-Calocedrus decurrens*) alliance is co-dominated by ponderosa pine (*Pinus ponderosa*) and incense cedar (*Calocedrus decurrens*) in the tree stratum. The tree canopy is typically intermittent with a sparse to intermittent shrub layer and variable herbaceous layer. This alliance is usually found along slopes, terraces, stream benches, and ridges. Associated species typically include Jeffrey pine (*Pinus jeffreyi*), sugar pine (*Pinus lambertiana*), and bigcone douglas fir (*Pseudotsuga macrocarpa*) (Sawyer et al. 2009).

This alliance occurs along the southeastern side and middle section of the northern shore of Lake Gregory. This community is disturbed due to its intersection with residential development and proximity to the recreational park associated with Lake Gregory. Pedestrian trails and structures are located beneath the tree canopy. Species observed in this vegetation community include Ponderosa pine, Jeffrey pine, deer brush (*Ceanothus integerrimus*), white alder (*Alnus rhombifolia*), and incense cedar. Plant species identified during field surveys conducted by Michael Baker across the project site are included in Appendix A, *Plant and Wildlife Species Observed List*.

Legend

- Project Site
- Reference Point
- Red Willow Thicket (0.58 acre)
- Mixed Conifer (17.59 acres)
- Beach (2.47 acres)
- Detention Basin (0.67 acre)
- Non-Vegetated Channel/Floodway (0.62 acre)
- Open Water (80.13 acres)
- Ornamental (18.77 acres)
- Developed (10.83 acres)

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Vegetation Communities and Other Land Uses

Figure 5

3.3.2 Red Willow Thicket (*Salix laevigata*) Association

Red willow thicket (*Salix laevigata*) association (CaCode 61.205.01) is dominated or co-dominated by red willow (*Salix laevigata*). This alliance is found along ditches, floodplains, lake edges, and low gradient depositions along streams and has an open to continuous canopy less than 66 feet (20 meters) with a variable herbaceous layer. Associated species may include box elder (*Acer negundo*), white alder, California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), California live oak (*Quercus agrifolia*), and various willows (*Salix exigua*, *S. gooddingii*, *S. laevigata*, and *S. lasiolepis*) (Sawyer et al. 2009). This vegetation community has a global and state rarity ranking of 3 and is considered vulnerable to extirpation or extinction (CDFW 2018).

This association occurs in a small patch on the southeast side of Lake Gregory, a stand within the San Moritz Channel delta, and a wetland area along the eastern shore. The stand is fairly monotypic red willow with an understory comprised of native and non-native herbaceous vegetation including Douglas' sagewort (*Artemisia douglasiana*), barley (*Hordeum* sp.), and rabbitsfoot grass (*Polypogon monspeliensis*).

3.3.3 Beach

This land cover type is described by Oberbauer et al. (2008) and includes sandy and/or cobbly areas along coastal strands, lagoons, or lakes that are mainly unvegetated; however, upper portions may be sparsely populated with herbaceous species. This land cover type occurs along the western and southeastern shoreline of Lake Gregory. No vegetation occurs in these areas.

3.3.4 Non-vegetated Channel/Floodway

The non-vegetated channel/floodway land cover is described by Oberbauer et al. (2008) as floodway features that are permanently unvegetated due to the variability in flow. These features are typically located on the sandy, gravelly, or rocky fringe of waterways or other flood control features.

This land cover type occurs in the southeastern portion of the project site (Houston Creek South Debris Basin and San Moritz Channel). Combined, these features appear to convey surface water flow from the Houston Creek south fork culvert outlet towards Lake Gregory.

3.3.5 Open Water

Open water consists of standing water with no emergent vegetation. This land cover type represents the surface water extent of Lake Gregory (based on September 2023 aerial imagery) and likely fluctuates throughout the year.

3.3.6 Detention Basin

The detention basin land cover consists of a routinely maintained flood control basin. This land cover occurs on the western side of Lake Gregory (Library Basin). Portions of this feature contain standing water and dead emergent vegetation. Google Earth imagery depicts a dense riparian canopy cover within the detention basin during years in which annual maintenance in the form of vegetation removal is not conducted.

3.3.7 Ornamental

The ornamental land cover type consists of areas that support landscaping plantings. This land cover occurs in the project site where landscape plantings have been installed as part of the park recreational areas, developments, and/or roadway and parking lot landscaping. Occasional native species are located within these ornamental areas and include pine, cedar, and alder.

3.3.8 Urban/Developed

Urban/developed lands are described by Oberbauer et al. (2008) as areas that have been constructed on or disturbed so severely that native vegetation is no longer supported. Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials (Oberbauer et al. 2008).

This land cover occurs along the northwestern, southern, and southeastern shores of Lake Gregory and the perimeter of the project site. These urban/developed areas consist of parking lots, sidewalks, and roads.

3.4 Floral Diversity

Floral diversity is limited within the project site due to the large amount of surface water and disturbed land cover types. A total of 23 plant species was recorded within the project site including 19 native species (83%) and four (17%) non-native species. A complete list of plant species observed within the project site is included in Appendix A, *Plant and Wildlife Species Observed List*.

3.5 Wildlife Diversity

Similar to the discussion of floral diversity, wildlife diversity is also limited based on the anthropogenic land uses and disturbance within the project site. A total of 19 wildlife species were observed during site visits. All are native species except for the honeybee (*Apis* mellifera) and red-eared slider (*Trachemys scripta elegans*). The complete list of wildlife species observed within the project site is included in Appendix A, *Plant and Wildlife Species Observed List*.

3.5.1 Insects

One insect species, western honeybee, was observed during the October 2023 field survey visiting flowering plants.

3.5.2 Fish

No fish species were observed during the field surveys. However, suitable habitat to support populations of fish were observed within the project site in both Lake Gregory and Houston Creek. This aquatic habitat is suitable for a number of fish species such as trout (*Oncorhynchus mykiss*), bluegill (*Lepomis macrochirus*), carp (*Cyprinus carpio*), channel catfish (*Ictalurus punctatus*), and largemouth bass (*Micropterus salmoides*). The lake is regularly stocked with catfish in June, July, and August and with rainbow trout in October and November (The Lake Gregory Company 2023).

3.5.3 Amphibians

No amphibians were observed during the field surveys. Suitable habitat to support populations of amphibians were observed within the project site and associated with most of the drainage inlets and debris basins. This habitat is suitable for a number of amphibian species such as Baja California treefrog (*Pseudacris hypochondriaca hypochondriaca*), American bullfrog (*Lithobates catesbeianus*), garden slender salamander (*Batrachoseps major major*), and ensatina (*Ensatina eschscholtzii*).

3.5.4 Reptiles

One reptile species, the non-native red-eared slider, was observed during the field surveys. Habitat within the project site is suitable for a number of other common reptilian species known from the region, such as alligator lizard (*Elgaria multicarinata webbii*), coast horned lizard (*Phrynosoma blainvillii*), western fence lizard (*Sceloporus occidentalis longipes*), western side-blotched lizard (*Uta stansburiana elegans*), and ring-necked snake (*Diadophis punctatus amabilis*).

3.5.5 Birds

Sixteen bird species were observed within or adjacent to the project site and included common species such as American coot (*Fulica americana*), mallard (*Anas platyrhynchos*), Cooper's hawk (*Accipiter cooperii*), double-crested cormorant (*Phalacrocorax auritus*), and northern mockingbird (*Mimus polyglottos*).

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) of 1918 and the CFGC. No active bird nests or birds displaying nesting behaviors were observed within the project site during the field surveys. Disturbed mixed conifer forest *Pinus ponderosa-Calocedrus decurrens* alliance within the project site provides suitable nesting opportunities for a variety of resident and migratory bird species. The bald eagle (*Haliaeetus leucocephalus*), state Fully Protected (FP) species, is known to occur within the project site. This species is discussed further in Section 3.6.2.

3.5.6 Mammals

California ground squirrel (*Otospermophilus beecheyi*), western grey squirrel (*Sciurus griseus*), Botta's pocket gopher (*Thomomys bottae*), and domestic dog (*Canis lupus familiaris*) were the only species directly observed during the field surveys. The project site has the potential to support a variety of mammalian species; however, most mammalian species in the region are nocturnal and are difficult to observe during a diurnal habitat assessment. Other common mammalian species that may occur within the project site include coyote (*Canis latrans*), Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), and several chipmunk species (*Neotamias* sp.).

3.6 Special-Status/Regulated Resources

The CNDDB, CIRP, Calflora, and iPaC were queried for reported locations of special-status plant and wildlife species and natural vegetation communities on and in the vicinity of the project site. The habitat assessment was conducted to assess and evaluate existing conditions of the habitats within the boundaries of the project site to determine if the existing vegetation communities, at the time of the field

surveys, have the potential to provide suitable habitat for special-status plant and wildlife species. Additionally, the potential for special-status species to occur within the project site were determined based on the reported locations in the CNDDB, CIRP, and Calflora databases using the following guidelines:

- **Present:** the species was observed or detected within the project site during the field surveys.
- **High:** Recent occurrence records (within 20 years) indicate that the species has been known to occur on or within one mile of the project site and the site is within the normal expected range of this species. Intact, suitable habitat preferred by this species occurs within the project site and/or there is viable landscape connectivity to a local known extant population(s) or sighting(s).
- **Moderate:** Recent occurrence records (within 20 years) indicate that the species has been known to occur within one mile of the project site and the site is within the normal expected range of this species. There is suitable habitat within the project site, but the site is ecologically isolated from any local known extant populations or sightings.
- **Low:** Recent occurrence records (within 20 years) indicate that the species has been known to occur within five miles of the project site, but the site is outside of the normal expected range of the species and/or there is poor quality or marginal habitat within the project site.
- **Not Expected:** There are no occurrence records of the species occurring within five miles of the project site, there is no suitable habitat within the project site, and/or the project site is outside of the known or expected range for the species.

Special-status biological resources identified during the literature review and their potential to occur within the project site or vicinity are presented in Appendix Table C-1: Potentially Occurring Special-Status Biological Resources, provided in Appendix B, *Potentially Occurring Special-Status Biological Resources*.

3.6.1 Special-Status Plant Species

Sixty-four regional special-status plant species were identified during the literature review. Each species' special-status ranking, preferred habitats, and potential to occur within the project site are provided in Appendix B, *Potentially Occurring Special-Status Biological Resources*. Due to the lack of suitable habitat and the site's elevation range, 33 special-status plants are not expected to occur on the project site. Coniferous forest and limited riparian habitats within the project site could support the following 31 species; however, due to ongoing land uses and anthropogenic disturbances, they were ascribed a low potential for occurrence:

- Parish's oxytheca (*Acanthoscyphus parishii* var. *parishii*)
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*)
- Plummer's mariposa lily (*Calochortus plummerae*)
- San Bernardino Mountains owl's-clover (*Castilleja lasiorhyncha*)
- Mojave paintbrush (*Castilleja plagiotoma*)
- Tulare cryptantha (*Cryptantha incana*)
- Mojave tarplant (*Deinandra mohavensis*)
- Johnston's monkeyflower (*Diplacus johnstonii*)
- southern Sierra woolly sunflower (*Eriophyllum lanatum* var. *obovatum*)
- pine green-gentian (*Frasera neglecta*)

- Johnston's bedstraw (*Galium johnstonii*)
- urn-flowered alumroot (*Heuchera caespitosa*)
- Parry's sunflower (*Hulsea vestita* ssp. *parryi*)
- Silver-haired ivesia (*Ivesia argyrocoma* var. *argyrocoma*)
- ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*)
- lemon lily (*Lilium parryi*)
- Mojave monardella (*Monardella exilis*)
- Hall's monardella (*Monardella macrantha* ssp. *hallii*)
- rock monardella (*Monardella saxicola*)
- California muhly (*Muhlenbergia californica*)
- golden-rayed pentachaeta (*Pentachaeta aurea* ssp. *aurea*)
- Parish's yampah (*Perideridia parishii* ssp. *parishii*)
- Transverse Range phacelia (*Phacelia exilis*)
- Mojave phacelia (*Phacelia mohavensis*)
- southern mountains skullcap (*Scutellaria bolanderi* ssp. *austromontana*)
- salt spring checkerbloom (*Sidalcea neomexicana*)
- chickweed oxytheca (*Sidotheca caryophylloides*)
- Laguna Mountains jewelflower (*Streptanthus bernardinus*)
- southern jewelflower (*Streptanthus campestris*)
- San Bernardino aster (*Symphyotrichum defoliatum*)
- Greata's aster (*Symphyotrichum greatae*)

Mojave tarplant (state endangered) is the only federal or state listed species with a low potential to occur. The remaining species have varying CRPRs ranging from 1B.2, Plants rare, threatened, or endangered in California and elsewhere; moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat) to 4.3, Watch List: Plants of limited distribution; not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

3.6.2 Special-Status Wildlife Species

Fifty-one special-status wildlife species were identified during the literature review. Each species' special-status ranking, preferred habitats, and potential to occur within the project site are provided in Appendix B, *Potentially Occurring Special-Status Biological Resources*.

Five special-status wildlife species have a moderate to high potential to occur within the project site and are described further below; western mastiff bat [*Eumops perotis californicus*; Species of Special Concern (SSC)], San Bernardino flying squirrel (*Glaucomys oregonensis californicus*; SSC), bald eagle [*Haliaetus leucocephalus*; State Fully Protected (FP)], osprey (*Pandion haliaetus*; CDFW Watch List), and yellow warbler (*Setophaga petechia*; SSC).

Western Mastiff bat: Listed as a California SSC, this species is found between central Mexico across the southwestern United States including west Texas, New Mexico, southwest Arizona, southern Nevada, and California. Primarily a cliff-dwelling species, it generally roosts under exfoliating rock slabs, and very

occasionally in buildings. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas (NatureServe 2023).

Three CNDDB records for this species were identified within the vicinity of the project site during the literature review. The most recent record (Occurrence Number 133) is from 1992 and is approximately eight miles southeast of the project site (CDFW 2023a). This species was not observed during field surveys; however, surveys were conducted during the day when this species is not expected to be active. Though suitable roosting habitat for this species was determined to be absent from the project survey area, open ponderosa pine forest has the potential to support foraging habitat.

San Bernardino flying squirrel: Listed as a California SSC, this species is found historically from three populations within the forests of the San Gabriel, San Bernardino, and San Jacinto Mountains within southern California. Flying squirrels are nocturnal and secretive, though easily distinguished from other arboreal squirrels by the presence of a furred patagium connecting the fore and hind limbs (Bolster 1998).

Six CNDDB records for this species were identified within the vicinity of the project site during the literature review. The most recent record (Occurrence Number 354) for this species is from 2005 and is approximately 0.5 mile east of the project site (CDFW 2023a). Eight locations of community science observations (86 observations between 2014 and 2023) in the neighborhoods surrounding Lake Gregory are reported on iNaturalist (2023). This species was not observed; however, during field surveys. Suitable habitat for this species was determined to be present within the project survey area in the form of mixed conifer forests.

Bald Eagle: The bald eagle is a State of California Fully Protected species and ranges across most of North America. This species is locally common and a yearlong resident of southern California. It is typically found near large water bodies such as seacoasts, estuaries, and inland lakes. This species generally nests in the canopy of tall confers, though they have been known to nest on the ground, on cellphone towers, and electrical poles.

Five CNDDB records for this species were identified during the literature review. The most recent record (Occurrence Number 354) for this species is from 2006 and is approximately one mile east of the project site (CDFW 2023a). In addition, many observations are reported by community scientists around the perimeter of Lake Gregory, five observations (2011-2022) on iNaturalist (2023) and 35 records (2011-2023) on eBird (2023). This species was not observed during field surveys but is expected to be a regular visitor. Though minimal suitable nesting habitat for this species was determined to be present within the project survey area, suitable foraging, and roosting habitat in the form of open water and mixed conifer forest is found within the project site.

Osprey: Osprey is a CDFW Watch List and U.S. Forest Service Sensitive species. This species is typically found in and around saltwater habitats, such as bays and estuaries, in California but they are also known to occur near inland lakes and rivers. They prefer to nest on tall, isolated trees, poles, and towers.

This species was not observed during field surveys; however, 66 community science observations are reported on eBird from 2009 to 2023 (eBird 2023) and two records from 2017 and 2022 are reported on iNaturalist (2023). Therefore, this species is expected to be a regular visitor, and due to the number of trees in the area, also has the potential to nest in the vicinity of the project site.

Yellow Warbler: A California SSC, this species is present in California from April through September and generally nests in riparian areas dominated by willows, cottonwoods, California sycamore (*Platanus racemosa*), or alder or in mature chaparral. It may also use oaks, conifers, and urban areas near stream courses.

Two CNDDB records for this species were identified during the literature review. The most recent record (Occurrence Number 101) is from 2015 and is approximately three miles south of the project site (CDFW 2023a). In addition, 17 records of Yellow Warbler sightings are reported on eBird between 2013 and 2023 (eBird 2023). This species was not observed during field surveys but is expected to be a regular summer and migrating visitor. Both suitable nesting and foraging habitat for this species is present within the project site.

3.6.3 Sensitive Natural Communities

Special-status vegetation communities include those listed as sensitive natural communities within the CNDDB or by CDFW (CDFW 2023f), and aquatic features that fall under the jurisdiction of state and/or federal regulatory agencies (see Section 3.6.5). Special-status communities also include USFWS-designated Critical Habitat (see Section 3.6.4) and other native vegetation communities that support special-status plant and wildlife species.

The literature review determined that three special-status vegetation communities occur in vicinity of the project site vicinity, southern mixed riparian forest, southern sycamore alder riparian woodland, and Riversidean alluvial fan sage scrub. None of these sensitive natural communities occur on the project site.

Two native vegetation communities occur on-site, disturbed mixed conifer forest and red willow thicket. Red willow thicket (CaCode 61.205.01) is considered a CDFW sensitive natural community (CDFW 2023f) and CDFW riparian habitat.

3.6.4 Critical Habitat

Under the definition included in the FESA, designated Critical Habitat refers to specific areas within the geographical range of a species that were occupied at the time it was listed and that contain the physical or biological features that are essential to the survival and eventual recovery of that species. Areas of Critical Habitat may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the occupied areas are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a federal nexus, the project proponent may be required to

provide suitable mitigation. Projects with a federal nexus include those that occur on federal lands, require federal permits (e.g., CWA Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS pursuant to the FESA.

The project site is located within approximately 1.5 miles of USFWS-designated Critical Habitat for the federally listed southwestern willow flycatcher (*Empidonax traillii extimus*) as illustrated in Figure 6, *Critical Habitat*. Based on the results of the field surveys no suitable habitat for the southwestern willow flycatcher occurs within the project site and therefore the species is not expected to occur within the project site.

3.6.5 Jurisdictional Aquatic Resources

As described in the Aquatic Resources Delineation Report (Michael Baker 2024), Lake Gregory, Library Basin, San Moritz Channel Basins, Aquatic Feature-1 (AF-1), and 20 of the 34 Inlet locations around the lake fall under the regulatory authority of the USACE, RWQCB, and CDFW. Jurisdictional features are shown in Figure 7, *USACE/RWQCB Jurisdictional Map*, and Figure 8, *CDFW Jurisdictional Map*.

The results of the aquatic resources delineation determined the presence of 78.85 acres of non-wetland and 0.53 acre of wetland waters of the US and waters of the State under the jurisdiction of the USACE and RWQCB, respectively. CDFW jurisdiction includes 77.98 acres of lake, 1.78 acres (2,437 linear feet) of streambed, and 0.29 acre of riparian habitat. Table 3, *Aquatic Resource Jurisdictional Limits Within the Project Site*, provides the details of the jurisdictional features included in the delineation.

Table 3: Aquatic Resource Jurisdictional Limits Within the Project Site

Jurisdictional Aquatic Resource*	Inlet Notes	USACE/RWQCB Non-wetland Waters (acres/feet)	USACE/RWQCB Wetland Waters (acres/feet)	CDFW Lake (acres/feet)	CDFW Streambed (acres/feet)	CDFW Riparian (acres)
Lake Gregory		77.98 (N/A)	0.00 (0)	77.98 (N/A)	0.00 (0)	0.29
Library Basin		0.00 (0)	0.41 (235)	0.00 (0)	0.41 (235)	0.00
San Moritz Channel		0.79 (993)	0.00 (0)	0.00 (0)	1.18 (993)	0.00
Inlet 1		0.0002 (5)	0.00 (0)	0.00 (0)	0.0002 (5)	0.00
Inlet 2	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 3	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 4		0.004 (83)	0.00 (0)	0.00 (0)	0.003 (83)	0.00
Inlet 5		0.003 (48)	0.00 (0)	0.00 (0)	0.003 (48)	0.00
Inlet 6		0.005 (70)	0.00 (0)	0.00 (0)	0.004 (70)	0.00

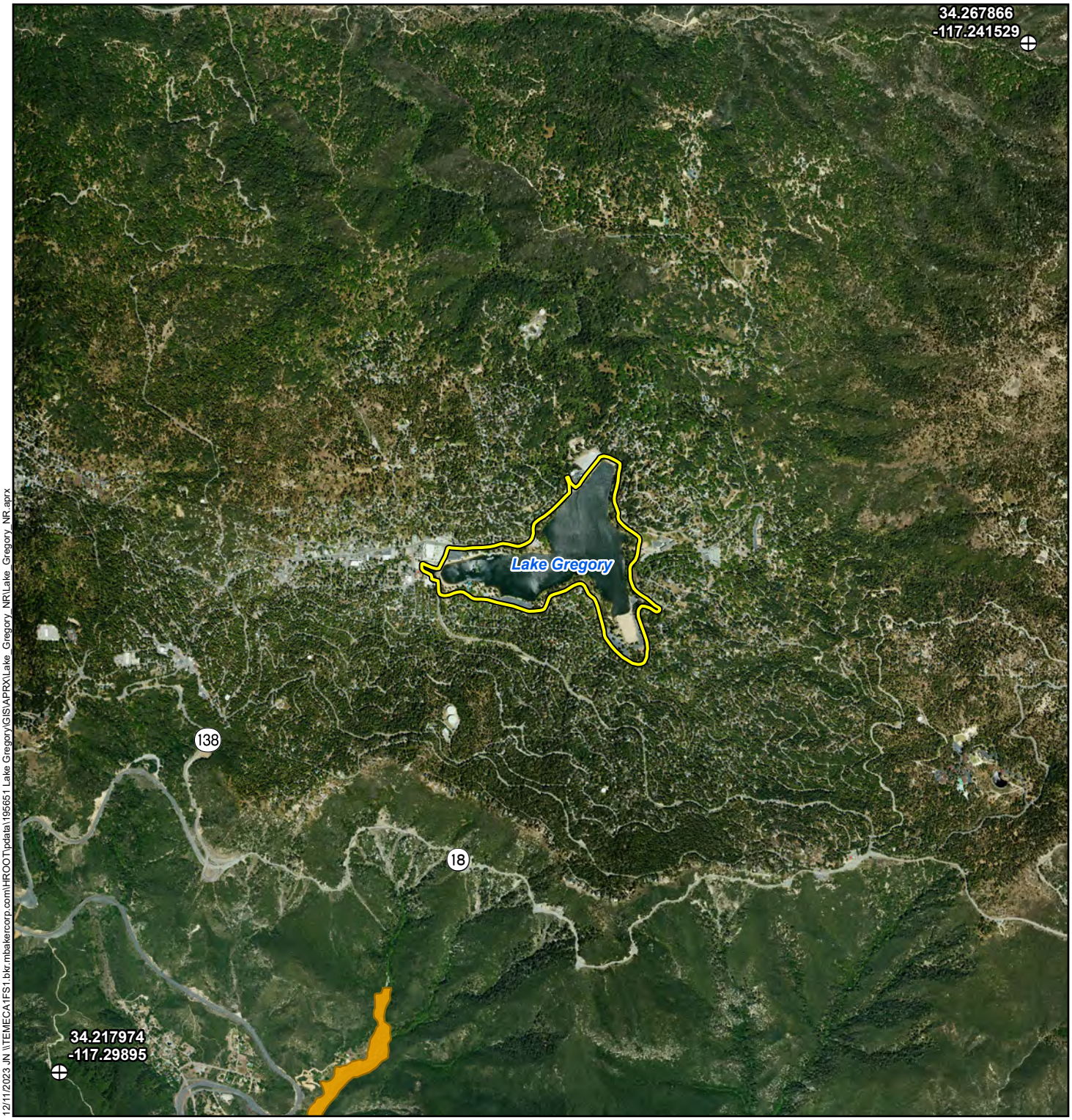
Jurisdictional Aquatic Resource*	Inlet Notes	USACE/RWQCB Non-wetland Waters (acres/feet)	USACE/RWQCB Wetland Waters (acres/feet)	CDFW Lake (acres/feet)	CDFW Streambed (acres/feet)	CDFW Riparian (acres)
Inlet 7	Observed, included with San Moritz Channel	N/A	N/A	N/A	N/A	N/A
Inlet 8		0.039 (344)	0.00 (0)	0.00 (0)	0.039 (344)	0.00
Inlet 9a		0.002 (47)	0.00 (0)	0.00 (0)	0.002 (47)	0.00
Inlet 9b	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 10		0.002 (75)	0.00 (0)	0.00 (0)	0.002 (75)	0.00
Inlet 11		0.002 (19)	0.12 (109)	0.00 (0)	0.115 (109)	0.00
Inlet 12		0.005 (103)	0.00 (0)	0.00 (0)	0.005 (103)	0.00
Inlet 13		0.006 (125)	0.00 (0)	0.00 (0)	0.006 (125)	0.00
Inlet 14		0.002 (44)	0.00 (0)	0.00 (0)	0.002 (44)	0.00
Inlet 15	Observed, not jurisdictional	0.00(0)	0.00 (0)	0.00 (0)	0.00(0)	0.00
Inlet 16		0.002 (36)	0.00 (0)	0.00 (0)	0.002 (36)	0.00
Inlet 17	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 18	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 19	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 20	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 21		0.005 (29)	0.00 (0)	0.00 (0)	0.005 (29)	0.00
Inlet 22	Observed, not jurisdictional	0.00(0)	0.00 (0)	0.00 (0)	0.00(0)	0.00
Inlet 23		0.0001 (5)	0.00 (0)	0.00 (0)	0.0001 (5)	0.00
Inlet 24		0.0006 (9)	0.00 (0)	0.00 (0)	0.0006 (9)	0.00
Inlet 25		0.0008 (18)	0.00 (0)	0.00 (0)	0.0008 (18)	0.00
Inlet 26	Not observed, underground, outlets to #25	N/A	N/A	N/A	N/A	N/A
Inlet 27	Not observed, underground, outlets to #25	N/A	N/A	N/A	N/A	N/A
Inlet 28		0.0004 (10)	0.00 (0)	0.00 (0)	0.0004 (10)	0.00
Inlet 29		0.0004 (8)	0.00 (0)	0.00 (0)	0.0004 (8)	0.00

Jurisdictional Aquatic Resource*	Inlet Notes	USACE/RWQCB Non-wetland Waters (acres/feet)	USACE/RWQCB Wetland Waters (acres/feet)	CDFW Lake (acres/feet)	CDFW Streambed (acres/feet)	CDFW Riparian (acres)
Inlet 30		0.00009 (4)	0.00 (0)	0.00 (0)	0.00009 (4)	0.00
Inlet 31	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 32	Not observed, assumed direct connection to Lake	N/A	N/A	N/A	N/A	N/A
Inlet 33	Observed, outlets directly into Lake, not jurisdictional	0.00(0)	0.00 (0)	0.00 (0)	0.00(0)	0.00
AF-1		0.002 (37)	0.00 (0)	0.00 (0)	0.002 (37)	0.00
Total		**78.85 (2,112)**	**0.53 (344)**	**77.98**	**1.78 (2,437)**	**0.29**

3.7 Regional Connectivity/Wildlife Movement

Wildlife corridors and linkages are key features for wildlife movement between habitat patches. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land.

Regional wildlife movement within the project site is not expected as the project site is surrounded by residential development. Areas surrounding the project site likely function as open habitat but do not function as movement corridors. It is likely that Lake Gregory and the surrounding habitat functions as a migratory stopover for bird species. The project site also supports dispersal of smaller terrestrial species, such as reptiles and small mammals, across the localized area.



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Legend

Project Site

Reference Point

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

Michael Baker INTERNATIONAL

0 1,250 2,500 Feet

Source: NAIP (2022), USFWS (11/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Critical Habitat

Figure 6

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Soil Pit
- Inlet Location

Michael Baker INTERNATIONAL

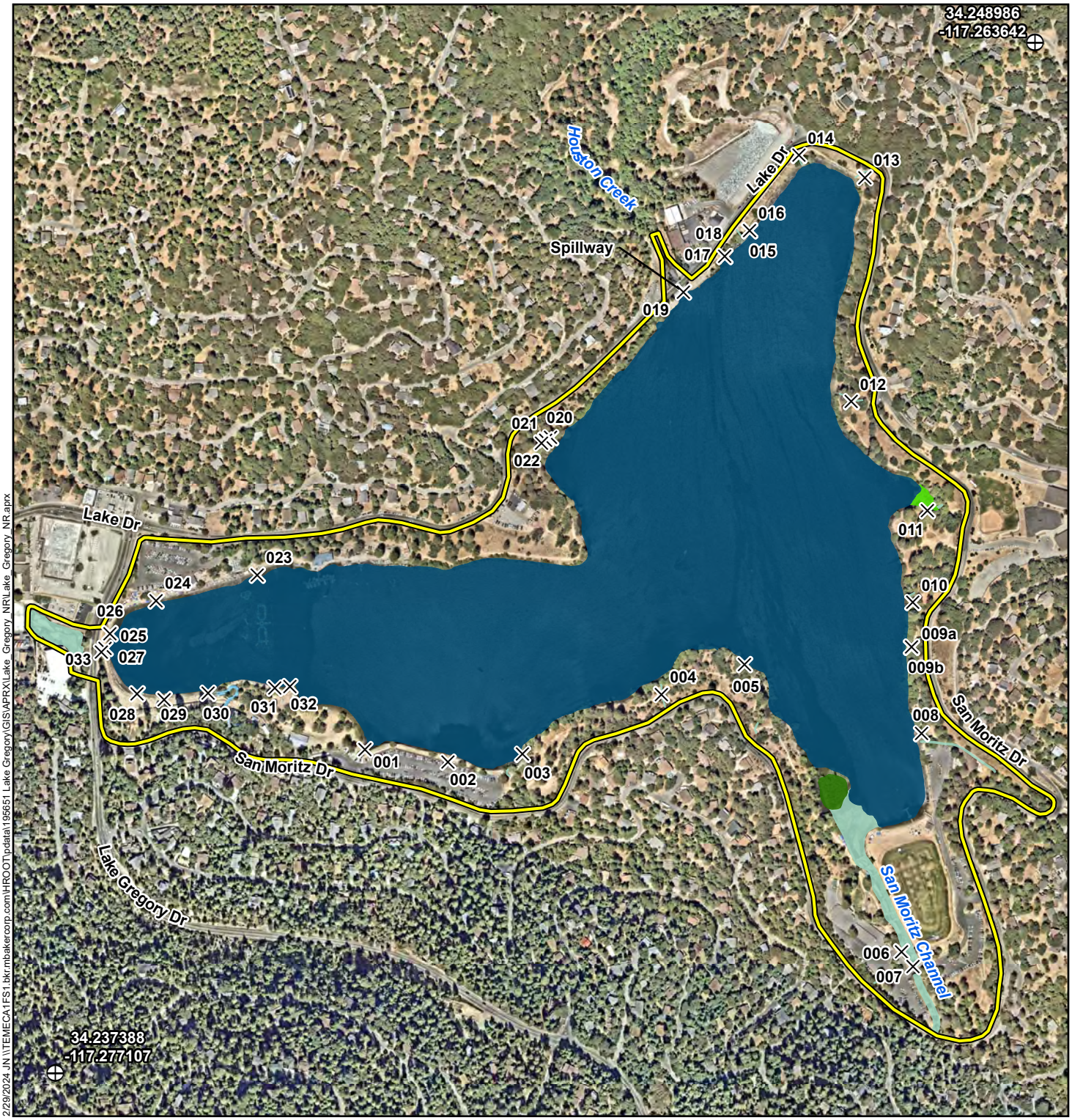
0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

USACE/RWQCB Jurisdictional Map

Figure 7



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Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Inlet Location

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

CDFW Jurisdictional Map

Figure 8

4.0 PROJECT IMPACTS

4.1 Definition of Impacts

4.1.1 Direct Impacts

Direct impacts are those that involve the loss, modification, or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Direct impacts can be permanent or temporary in nature. Permanent direct impacts typically refer to 100% permanent loss of a biological resource. It is also often referred to as the "project footprint" and refers to the area where vegetation clearing, grubbing, or mass grading occurs. It may include brush management zones or fuel modification zones.

Direct temporary impacts typically refer to short-term removal of a biological resource where the resource is expected to fully recover its function upon completion of the project. Examples of temporary disturbance may include slope remediation sites, construction access roads, staging areas, stockpiles, mowing, dredging, etc. Such sites would not have permanent structures.

4.1.2 Indirect Impacts

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off-site areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

4.2 Thresholds of Significance

The environmental impacts relative to biological resources are assessed using impact significance threshold criteria, which mirror the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State to:

> "Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7, Thresholds of Significance, each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

> "The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species; ..."

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including candidate, sensitive, or special status species; riparian habitat or other sensitive natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and, adopted HCPs. This is done in the form of a checklist of questions to be answered during the Initial Study leading to the preparation of the appropriate environmental documentation for a project. Because these questions are derived from standards in other laws, regulations, and other commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds. Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following conditions would result from implementation of the proposed project.

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

For the purposes of this impact analysis the following definitions apply:

- "Substantial adverse effect" means loss or harm of a magnitude which, based on current scientific data and knowledge would: (1) substantially reduce population numbers of a listed, candidate, sensitive, rare, or otherwise special status species; (2) substantially reduce the distribution of a sensitive natural community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) in a geographical area defined by interrelated biological components and systems. In the case of this analysis the prescribed geographical area is considered to be the region including the San Bernardino Mountains.
- "Conflict" means contradiction of a magnitude, which based on foreseeable circumstances would preclude or prevent substantial compliance.
- "Rare" means: (1) that the species exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or (2) the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the FESA.

4.3 Proposed Project

4.3.1 Project Summary

As described previously in Section 1.2 and shown in Figure 9, *Project Impacts*, the proposed project includes two elements. The first element is the construction of improvements and will result in permanent impacts to 1) install an in-water barrier at Swim Beach for sediment management and 2) improve inlets at 22 locations around the lake perimeter; and temporary impacts to 1) regrade the slope of Swim Beach, 2) reconstruct and enhance the San Moritz Channel Basins, and 3) dredge and regrade the South Beach area.

The second element of the proposed project includes future ongoing maintenance after the construction of improvements. Ongoing maintenance will result in temporary impacts to Lake Gregory, San Moritz Channel Basins, and Library Basin for periodic sediment management activities, grooming Swim Beach, and other repairs and maintenance as described previously (see Section 1.2). All ongoing maintenance activities will be conducted in accordance with a Lake Gregory Operations and Maintenance (O&M) Manual (JS&TM 2023).

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Legend

- Project Site
- Reference Point
- Grading/Dredging (Temporary Impacts)
- Cutoff Wall (Permanent Impact)
- Inlets/Rip Rap (Permanent Impacts)

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Project Impacts

Figure 9

4.3.2 Project Design Features

Prior to project implementation, a qualified biologist will be present to flag the extent of the habitat at the San Moritz Channel Basins red willow thicket. Construction fencing will be erected based on the flagging locations to minimize temporary impacts to red willow thicket habitat.

4.4 Standard Conditions

As part of the proposed project's review and approval, a number of performance criteria and standard conditions must be met. Among these are those that relate to federal and state regulating agencies for impacts to wetlands, riparian habitats, and stream courses.

4.4.1 Federal Clean Water Act, Section 404

The USACE regulates discharges of dredged or fill materials into WoUS and wetlands pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Based on the results of the Aquatic Resources Delineation and determination of USACE jurisdictional wetland and non-wetland WoUS within the project site, the USACE will require Section 404 permit prior to project implementation.

4.4.2 Federal Clean Water Act, Section 401

The mission of the California RWQCB is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the State's waters, recognizing local differences in climate, topography, geology, and hydrology. Section 401 of the CWA requires that:

> "…any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act."

Based on the results of the Aquatic Resources Delineation and determination of RWQCB jurisdictional features within the project site, the RWQCB will require Section 401 Water Quality Certification prior to project implementation.

4.4.3 State of California Fish and Game Code, Section 1602

Section 1602 of the CFGC requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, it must first notify the CDFW of the proposed project. During this notification process, the CDFW will review the proposed project as it affects streambed habitats within the project site. CDFW may then place conditions on the Section 1602 clearance to avoid, minimize, and mitigate the potentially significant adverse impacts within CDFW jurisdictional limits.

4.4.4 County of San Bernardino Development Code, Plant Protection and Management

Chapter 88.01, Plant Protection and Management, of the San Bernardino County Development Code regulates the removal of mountain forest and valley trees (§ 88.01.070), riparian vegetation (§ 88.01.080), and Bald Eagle perch trees (88.01.050), and provides guidelines to protect trees from insects and disease (§ 88.01.090).

Section 88.01.070 defines native trees as "A living, native tree with a six inch or greater stem diameter or 19 inches in circumference measured four and one-half feet above natural grade level." Removal of native trees require a Tree or Plant Removal Permit issued in compliance with § 88.01.050. The proposed project will not remove any "native trees" during project activities.

Section 88.01.080 regulates riparian vegetation and is intended to augment and coordinate with the responsibilities of the California Department of Fish and Wildlife. Regulated Riparian Plants include:

1. "*Vegetation Described*. The removal of vegetation within 200 feet of the bank of a stream, or in an area indicated as a protected riparian area on an overlay map or Specific Plan, shall require approval of a Tree or Plant Removal Permit in compliance with § 88.01.050 (Tree or Plant Removal Permits) and shall be subject to environmental review.
2. *Streams*. For the purposes of this Section, streams include those shown on United States Geological Survey Quadrangle topographic maps as perennial or intermittent, blue or brown lines (solid or dashed), and river wash areas." Lake Gregory outlets to Houston Creek, which is shown as a USGS blueline stream.

Preconstruction inspections shall be required to verify the presence of riparian vegetation. Conditions of approval for removal of riparian vegetation may be imposed in addition to, and in combination with, any condition imposed in compliance with § 88.01.050 (Tree or Plant Removal Permits). Additionally, a bald eagle perch tree will not be removed unless an adequate substitution is provided.

4.5 Impact Analysis

4.5.1 Impact BIO-1: Special-Status Species

Will the proposed project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

4.5.1.1 Impacts to Special-Status Plant Species

No special-status plant species were observed within the project site during 2023 surveys. Thirty-one special-status plant species have the potential to occur due to the presence of coniferous and limited

riparian habitat. However, the potential is very low due to current land use and ongoing anthropogenic disturbance in the coniferous forest understory. Regardless, potentially significant direct impacts resulting from construction activities to install improvements associated with the drainage inlets in upland areas could occur to special-status plant species if activities occur in suitable habitat. Potentially significant temporary indirect impacts may occur during construction within or near suitable habitat in the form of dust and increased human activity.

4.5.1.2 Impacts to Special Status Wildlife Species

Five special-status wildlife species have a moderate to high potential to occur within the project site, western mastiff bat, San Bernardino flying squirrel, bald eagle, osprey, and yellow warbler. The proposed project is not expected to have any permanent impacts to these species. Indirect temporary impacts due to the partial dewatering of Lake Gregory will decrease the amount of foraging habitat for western mastiff bat, bald eagle, and osprey. This temporary indirect impact is expected to be less than significant due to the large size of the lake in comparison with the small proposed dewatered area at swim beach. Indirect temporary impacts may occur to nesting birds due to increased noise levels during construction and dredging activities and are considered potentially significant.

4.5.2 Impact BIO-2: Special-Status Natural Communities

Will the proposed project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

LESS THAN SIGNIFICANT

The 132-acre project site is dominated by open water (Lake Gregory). Native vegetation communities total 18.17 acres and include disturbed mixed conifer forest (17.59 acres) and red willow thicket (0.58 acre). The remaining vegetation communities and land cover types are unvegetated or dominated by non-native vegetation. A total of 0.231 acre of permanent and 15.205 acres of temporary impacts are anticipated as shown in Table 4, *Impacts to Natural Communities and Land Cover Types*, and Figure 10, *Impacts to Vegetation Community and Land Cover Types*.

Table 4: Impacts to Natural Communities and Land Cover Types

Vegetation Community/Land Cover Type	Existing Extent (acres)	Permanent Impacts (sq ft)	Permanent Impacts (acres)	Temporary Impacts (sq ft)	Temporary Impacts (acres)
Disturbed Mixed Conifer Forest *Pinus ponderosa-Calocedrus decurrens* Alliance	17.59	1,394.88	0.032	1,712.24	0.039
Red Willow Thicket *Salix laevigata* Alliance	0.58	0.00	0.00	2,859.96	0.066
Beach	2.47	173.63	0.004	71,757.67	1.647
Non-vegetated channel/Floodway	0.62	104.73	0.002	50.12	0.001
Open Water	80.13	4,012.90	0.092	572,787.25	13.149

Vegetation Community/Land Cover Type	Existing Extent (acres)	Permanent Impacts (sq ft)	Permanent Impacts (acres)	Temporary Impacts (sq ft)	Temporary Impacts (acres)
Ornamental	18.77	4,382.05	0.101	8,174.58	0.188
Urban/Developed	10.83	0.00	0.00	5,027.12	0.115
Detention Basin	0.67	0.00	0.00	0.00	0.00
Total	**131.66**	**10,068.18**	**0.231**	**662,368.93**	**15.20510.79**

The 0.58 acre of red willow thicket is considered riparian habitat and a sensitive natural community. No permanent impacts will occur to this natural community; however, there will be 0.066 acre of temporary direct impacts in the southeast portion of the project site associated with the dredging of South Basin. This indirect temporary impact would be considered less than significant.

4.5.3 Impact BIO-3: Wetlands

Will the proposed project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

NO IMPACT

As documented in the Aquatic Resources Delineation Report (Michael Baker 2024), 0.53 acre of wetland USACE Waters of the US and RWQCB wetland Waters of the State occur within the project site. The 0.53 acre consists of Library Basin in the western portion of the project site (0.41 acre) and Inlet 11 in the eastern portion of the project site (0.12 acre). Neither of these areas will be permanently or temporarily impacted by the proposed project as shown in Figure 11, *Impacts to Aquatic Resources*. Therefore, no impacts to wetlands will occur.

Non-wetland Jurisdictional Aquatic Resources

As shown in Table 5, *Impacts to Non-Wetland Jurisdictional Aquatic Resources*, and Figure 11, *Impacts to Aquatic Resources*, approximately 0.067 acre (2,895.60 square feet) of USACE non-wetland Waters of the US and RWQCB non-wetland Waters of the State and 0.067 acre (2,937.98 square feet) of CDFW jurisdictional lake and non-vegetated streambed will be permanently impacted by the proposed project. Temporary impacts include 12.47 acres (543,200.22 square feet) of USACE non-wetland Waters of the US and RWQCB non-wetland Waters of the State and 12.58 acres (548,047.22 square feet) of CDFW lake, non-vegetated streambed, and associated riparian habitat. Temporary impacts to the 0.066 acre (2,859.96 square feet) of CDFW associated riparian habitat were discussed previously in Section 4.5.2, *Impacts to Special-Status Natural Communities*, and determined to be less than significant.

Table 5: Impacts to Non-Wetland Jurisdictional Aquatic Resources

Jurisdictional Aquatic Resource	USACE/RWQCB Permanent Impacts [acres (sq ft)]	USACE/RWQCB Temporary Impacts [acres (sq ft)]	CDFW Permanent Impacts [acres (sq ft)]	CDFW Temporary Impacts [acres (sq ft)]
Lake Gregory	0.063 (2,725.74)*	11.93 (519,463.42)**	0.063 (2,725.74)*	11.99 (522,323.37)**
San Moritz Channel	0.0 (0.0)	0.54 (23,588.31)	0.0 (0.0)	0.59 (25,575.36)
Inlet 1	0.0002 (9.07)	0.0 (0.0)	0.0002 (9.07)	0.0 (0.0)
Inlet 6	0.0014 (62.35)	0.0 (0.0)	0.0024 (104.733)	0.0 (0.0)
Inlet 8	0.0 (0.0)	0.0024 (106.07)	0.0 (0.0)	0.0024 (106.07)
Inlet 9a	0.0005 (23.28)	0.0 (0.0)	0.0005 (23.28)	0.0 (0.0)
Inlet 13	0.0007 (29.74)	0.0 (0.0)	0.0007 (29.74)	0.0 (0.0)
Inlet 23	0.0 (0.0)	0.0001 (5.05)	0.0 (0.0)	0.0001 (5.05)
Inlet 24	0.0002 (7.31)	0.0004 (18.71)	0.0002 (7.31)	0.0004 (18.71)
Inlet 25	0.0 (0.0)	0.0004 (18.26)	0.0 (0.0)	0.0004 (18.26)
Inlet 28	0.0004 (19.17)	0.0 (0.0)	0.0004 (19.17)	0.0 (0.0)
Inlet 29	0.0004 (15.48)	0.0 (0.0)	0.0004 (15.48)	0.0 (0.0)
Inlet 30	0.0001 (3.46)	0.00001 (0.40)	0.0001 (3.46)	0.00001 (0.40)
Total	**0.067 (2,895.60)**	**12.47 (543,200.22)**	**0.067 (2,937.98)**	**12.58 (548,047.22)**

*Includes in-water barrier, inlet locations 005 and 032, and portions of inlet locations 013 and 028.

**Includes grading at Swim Beach and dredging at South Beach and South Lake.

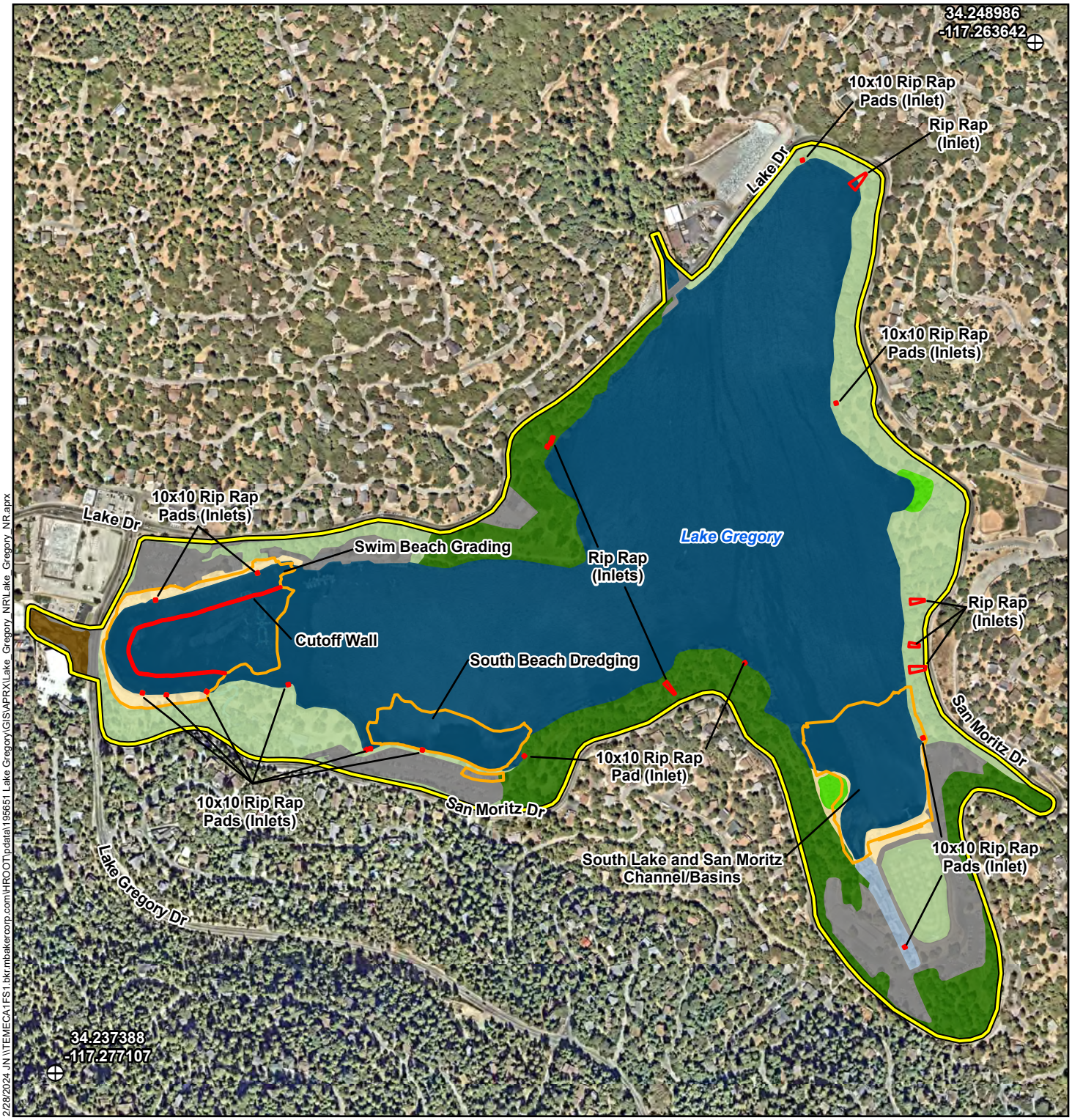
Impacts to non-wetland jurisdictional aquatic resources will require a Section 404 permit from the USACE, a Section 401 Water Quality Certification (WQC) from the RWQCB, and a CDFW Lake and Streambed Alteration Agreement prior to impacts occurring within each agency's jurisdiction (see Mitigation Measure BIO-3 in Section 5.0). Agencies may also impose mitigation measures to ensure no net loss of function and values.

4.5.4 Impact BIO-4: Wildlife Movement and Migratory Species

Will the proposed project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

As discussed in Section 3.7, the project site does not function as a wildlife movement corridor. It is likely; however, that Lake Gregory and the surrounding habitat functions as a migratory stopover for bird species. Indirect temporary impacts may occur to nesting birds due to increased noise levels during construction and dredging activities and are considered potentially significant.



2/28/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Red Willow Thicket (0.58 acre)
- Mixed Conifer (17.59 acres)
- Beach (2.47 acres)
- Detention Basin (0.67 acre)
- Non-Vegetated Channel/Floodway (0.62 acre)
- Open Water (80.13 acres)
- Ornamental (18.77 acres)
- Developed (10.83 acres)
- Temporary Impacts
- Permanent Impacts

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Impacts to Vegetation Communities

Figure 10

3/1/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation
- Vegetated Streambed, Wetland Waters of the U.S./State
- Non-Vegetated Streambed, Non-Wetland Waters of the U.S./State
- CDFW Lake, Non-Wetland Waters of the U.S./State
- Non-Wetland Waters of the U.S./State
- Temporary Impacts
- Permanent Impacts

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
BIOLOGICAL RESOURCES ASSESSMENT

Impacts to Aquatic Resources

Figure 11

4.5.5 Impact BIO-5: Consistency with Local Policies and Ordinances

Will the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

NO IMPACT

The project site supports trees that are regulated under the San Bernardino County Development Code, Chapter 88.01, Plant Protection and Management, specifically section 88.01.070 mountain forest and valley trees, 88.01.080 riparian vegetation, and 88.01.050 bald eagle perch trees (88.01.050). The proposed project will not remove any regulated trees; therefore, will not conflict with this local policy.

Temporary impacts to riparian vegetation are discussed in Section 4.5.2, *Impacts to Special-Status Natural Communities*. Indirect impacts (i.e., temporary noise impacts during construction) to bald eagle are discussed above in Section 4.5.1, *Impacts to Special-Status Species*.

4.5.6 Impact BIO-6: Consistency with an Adopted Habitat Conservation Plan

Will the proposed project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

NO IMPACT

The project site is not within or subject to the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

5.0 MITIGATION MEASURES

The mitigation measures described above in Section 4.0 are summarized below. Implementation of these measures are required to avoid the potential for direct or indirect impacts to special-status plants, nesting birds, and non-wetland jurisdictional aquatic features.

Impact BIO-1: Special Status Species

Mitigation Measure BIO-1: Prior to the construction of project improvements (e.g., Swim Beach in-water barrier, inlet improvements, San Moritz Channel Basins reconstruction/enhancement), a pre-construction survey will be conducted within the appropriate blooming period(s) to ensure no special status plant species are present or will be impacted within the proposed impact areas. If no special-status plant species are found during the pre-construction survey, no further mitigation is required and there will be no impact to special-status plant species.

If populations of special-status plants are found during the pre-construction survey and they are located within permanent or temporary impact areas, avoidance measures will be explored to protect the special-status plant population(s). If avoidance is not possible, measures to minimize impacts will include on-site restoration and detailed in the Lake Gregory Habitat Mitigation and Monitoring Plan (in preparation) in consultation with CDFW to reduce impacts to less than significant.

If special-status species are found during the pre-construction survey and would be impacted during future ongoing maintenance activities, mitigation for these impacts would also be addressed in the Lake Gregory Habitat Mitigation and Monitoring Plan (in preparation).

Mitigation Measure BIO-2: Prior to commencing project activities (including construction of improvements and future maintenance) during the nesting season (December 15-September 15), a designated qualified biologist shall survey the project site and a biologically defensible buffer distance for both diurnal and nocturnal nesting birds. Surveys shall be conducted by the designated qualified biologist at the appropriate time(s) of day, no more than three business days prior to commencement of project activities. If an active bird nest is located, the designated qualified biologist shall implement and monitor specific avoidance and minimization measures as specified in a CDFW-approved Nesting Bird Plan (NBP, Dudek 2020). The NBP includes project specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur and that the project complies with all applicable laws related to nesting birds and birds of prey. The NBP also includes monitoring protocols; survey timing and duration; the creation, maintenance, and submittal of a bird nesting log to CDFW; and project-specific avoidance and minimization measures. Avoidance measures include project phasing and timing, monitoring of project-related noise, sound walls, and buffers.

Impact BIO-3: Wetlands

Mitigation Measure BIO-3: Prior to grading or other disturbance within the project site, the proposed impacts to federal and state regulated non-wetland waters shall be subject to the regulations set forth by

the USACE, RWQCB, and CDFW. Any alteration to jurisdictional aquatic features will require a permit from the USACE pursuant to Section 404 of the Clean Water Act, Water Quality Certification from the RWQCB under Section 401 of the Clean Water Act and the state Porter-Cologne Water Quality Control Act, and a Lake and Streambed Alteration Agreement with the CDFW under Section 1602 of the State Fish and Game Code. An evaluation of mitigation alternatives shall include consideration of avoidance and/or on-site or off-site mitigation.

The CDFW may require mitigation for all unavoidable impacts. This is anticipated to include on or off-site replacement, or in-lieu compensation, of RWQCB "waters of the State" and CDFW jurisdictional streambed at a ratio no less than 1:1. No construction within the project site shall occur until mitigation for jurisdictional areas has been formalized, approved, and implemented to the satisfaction of USACE, RWQCB, and CDFW such that impacts are reduced to a less than significant level. If substantial changes to the site plan result, a revised site plan shall be submitted to the Planning Department for review and approval.

6.0 UNAVOIDABLE SIGNIFICANT IMPACTS

The proposed project, inclusive of project design features and mitigation measures, will mitigate all potentially significant adverse impacts to special-status plant and wildlife species and jurisdictional aquatic resources.

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ATTACHMENT A

PLANT AND WILDLIFE SPECIES OBSERVED LIST

Table A-1: Plant Species Observed

*Scientific Name**	Common Name	Cal-IPC Rating
Plants		
Alnus rhombifolia	white alder	
Artemisia douglasiana	mugwort	
Baccharis salicifolia	mule fat	
*Bromus tectorum**	cheatgrass	High
Calocedrus decurrens	incense cedar	
Ceanothus integerrimus	deer brush	
Cornus nuttallii	Pacific dogwood	
*Erodium cicutarium**	redstem filaree	
Heterotheca grandiflora	telegraph weed	
Hordeum sp.	hordeum	Moderate
Juncus acutus	spiny rush	
Oenothera elata ssp. hookeri	evening primrose	
Phoradendron leucarpum	oak mistletoe	
Pinus jeffreyi	Jeffrey pine	
Pinus ponderosa	Ponderosa pine	
Polypogon monspeliensis	rabbitsfoot grass	
Populus fremontii	Fremont cottonwood	
Quercus chrysolepis	canyon live oak	
Quercus kelloggii	California black oak	
Salix exigua	sandbar willow	
Salix gooddingii	Gooding's black willow	
Salix laevigata	red willow	
Salix lasiolepis	arroyo willow	
*Sisymbrium irio**	london rocket	Limited
*Taraxacum officinale**	common dandelion	

* Non-native species

** **California Invasive Plant Council (Cal-IPC) Ratings**

High These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are

conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

Moderate These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Table A-2: Wildlife Species Observed

*Scientific Name**	Common Name	Special-Status Rank**
Amphibians		
Trachemys scripta elegans	red-eared slider	
Birds		
Anas platyrhynchos	mallard	
Aphelocoma californica	California scrub-jay	
Corvus brachyrhynchos	American crow	
Colaptes auratus	northern flicker	
Cyanocitta stelleri	Stellar's jay	
Euphagus cyanocephalus	Brewer's blackbird	
Fulica americana	American coot	
Junco hyemalis	dark-eyed junco	
Melanerpes formicivorus	acorn woodpecker	
Mimus polyglottos	northern mockingbird	
Nannopterum auritum	double-crested cormorant	
Pipilo maculatus	spotted towhee	
Podilymbus podiceps	pied-billed grebe	
Psaltriparus minimus	bushtit	
Sayornis nigricans	black phoebe	
Insects		
*Apis mellifera**	western honey bee	
Mammals		
Sciurus griseus	western grey squirrel	
Thomomys bottae	Botta's pocket gopher	
*Canis familiaris**	domestic dog	

* Non-native species

** **Special-Status Rank**

U.S. Fish and Wildlife Service

FE Endangered – any species which is in danger of extinction throughout all or a significant portion of its range.

California Department of Fish and Wildlife

SE Endangered – any native species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range

due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

SSC Species of Special Concern – any species, subspecies, or distinct population of fish, amphibian, reptile, bird, or mammal native to California that currently satisfies one or more of the following criteria:

- is extirpated from California or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed.
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

ATTACHMENT B

POTENTIALLY OCCURRING SPECIAL-STATUS BIOLOGICAL RESOURCES

Table B-1: Potentially Occurring Special-Status Plant Species

Scientific Name	Common Name	Status (Federal/State/CRPR/Other)	Habitats/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in Study Area
Acanthoscyphus parishii var. parishii	Parish's oxytheca	None/None/4.2/None	Chaparral, Lower montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/June–Sep/4005–8530	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Allium howellii var. clokeyi	Mt. Pinos onion	None/None/1B.3/None	Great Basin scrub, Meadows and seeps, Pinyon and juniper woodland/perennial bulbiferous herb/Apr–June/4265–6070	Not expected to occur. No suitable habitat is present.
Allium parishii	Parish's onion	None/None/4.3/None	Joshua tree "woodland," Mojavean desert scrub, Pinyon and juniper woodland; Rocky/perennial bulbiferous herb/Apr–May/2955–5695	Not expected to occur. No suitable habitat is present.
Ambrosia monogyra	singlewhorl burrobrush	None/None/2B.2/None	Chaparral, Sonoran desert scrub; Sandy/perennial shrub/Aug–Nov/35–1640	Not expected to occur. The study area is outside of the species' known elevation range.
Arenaria paludicola	marsh sandwort	FE/SE/1B.1/None	Marshes and swamps; Openings, Sandy/perennial stoloniferous herb/May–Aug/10–560	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Asclepias nyctaginifolia	Mojave milkweed	None/None/2B.1/None	Mojavean desert scrub, Pinyon and juniper woodland/perennial herb/May–June/2870–5580	Not expected to occur. No suitable habitat is present.
Berberis nevinii	Nevin's barberry	FE/SE/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; Gravelly (sometimes), Sandy (sometimes)/perennial evergreen shrub/(Feb)Mar–June/230–2705	Not expected to occur. The study area is outside of the species' known elevation range.
Brodiaea filifolia	thread-leaved brodiaea	FT/SE/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; Clay (often)/perennial bulbiferous herb/Mar–June/80–3675	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	None/None/1B.2/None	Chaparral, Lower montane coniferous forest, Meadows and seeps; Mesic/perennial bulbiferous herb/Apr–July/2330–7840	Low potential to occur. Suitable habitat for this species is present within the study area; however, due to a high level of anthropogenic disturbance, the potential for this species to occur is limited.
Calochortus plummerae	Plummer's mariposa-lily	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland; Granitic, Rocky/perennial bulbiferous herb/May–July/330–5580	Low potential to occur. Suitable habitat for this species is present within the study area; however, due to a high level of anthropogenic disturbance, the potential for this species to occur is limited.
Canbya candida	white pygmy-poppy	None/None/4.2/None	Joshua tree "woodland," Mojavean desert scrub, Pinyon and juniper woodland; Granitic, Gravelly, Sandy/annual herb/Mar–June/1970–4790	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	None/None/1B.2/None	Chaparral, Meadows and seeps, Pebble (Pavement) plain, Riparian woodland, Upper montane coniferous forest; Mesic/annual herb (hemiparasitic)/May–Aug/4265–7840	Low potential to occur. Suitable habitat for this species is present within the study area; however, due to a high level of anthropogenic disturbance, the potential for this species to occur is limited.

Scientific Name	Common Name	Status (Federal/State/CRPR/Other)	Habitats/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in Study Area
Castilleja plagiotoma	Mojave paintbrush	None/None/4.3/None	Great Basin scrub, Joshua tree "woodland," Lower montane coniferous forest, Pinyon and juniper woodland/perennial herb (hemiparasitic)/Apr–June/985–8205	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Centromadia pungens ssp. laevis	smooth tarplant	None/None/1B.1/None	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; Alkaline/annual herb/Apr–Sep/0–2100	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	FE/SE/1B.2/None	Coastal dunes, Marshes and swamps/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Chorizanthe parryi var. parryi	Parry's spineflower	None/None/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; Openings, Rocky (sometimes), Sandy (sometimes)/annual herb/Apr–June/900–4005	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Chorizanthe xanti var. leucotheca	white-bracted spineflower	None/None/1B.2/None	Coastal scrub, Mojavean desert scrub, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–June/985–3935	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Cryptantha incana	Tulare cryptantha	None/None/1B.3/None	Lower montane coniferous forest/annual herb/June–Aug/4690–7055	Low potential to occur. Suitable habitat for this species is present within the study area; however, due to a high level of anthropogenic disturbance, the potential for this species to occur is limited.
Deinandra mohavensis	Mojave tarplant	None/SE/1B.3/None	Chaparral, Coastal scrub, Riparian scrub; Mesic/annual herb/(Jan–May)June–Oct/2100–5250	Low potential to occur. Minimal riparian habitat for this species is present within the study area; however, due to a high level of anthropogenic disturbance, the potential for this species to occur is limited.
Diplacus johnstonii	Johnston's monkeyflower	None/None/4.3/None	Lower montane coniferous forest/annual herb/May–Aug/3200–9580	Low potential to occur. Suitable habitat for this species is present within the study area; however, due to a high level of anthropogenic disturbance, the potential for this species to occur is limited.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub; Sandy/annual herb/Apr–June/655–2495	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Dudleya abramsii ssp. affinis	San Bernardino Mountains dudleya	None/None/1B.2/None	Pebble (Pavement) plain, Pinyon and juniper woodland, Upper montane coniferous forest; Carbonate (sometimes), Granitic (sometimes)/perennial herb/Apr–July/4100–8530	Not expected to occur. Although coniferous forest is present, the understory has a high level of anthropogenic disturbance and does not support the appropriate soils for this species.
Eremothera boothii ssp. boothii	Booth's evening-primrose	None/None/2B.3/None	Joshua tree "woodland," Pinyon and juniper woodland/annual herb/Apr–Sep/2675–7875	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status (Federal/State/CRPR/Other)	Habitats/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in Study Area
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	FE/SE/1B.1/None	Chaparral, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Apr–Sep/300–2000	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Erigeron parishii	Parish's daisy	FT/None/1B.1/None	Mojavean desert scrub, Pinyon and juniper woodland; Carbonate (usually), Granitic (sometimes)/perennial herb/May–Aug/2625–6560	Not expected to occur. No suitable habitat is present.
Eriophyllum lanatum var. obovatum	southern Sierra woolly sunflower	None/None/4.3/None	Lower montane coniferous forest, Upper montane coniferous forest; Loam, Sandy/perennial herb/June–July/3655–8205	Low potential to occur. Coniferous forest and riparian habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Fimbristylis thermalis	hot springs fimbristylis	None/None/2B.2/None	Meadows and seeps/perennial rhizomatous herb/July–Sep/360–4395	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Frasera neglecta	pine green-gentian	None/None/4.3/None	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest/perennial herb/May–July/4595–8205	Low potential to occur. Coniferous forest and riparian habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Galium johnstonii	Johnston's bedstraw	None/None/4.3/None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland, Riparian woodland/perennial herb/June–July/4005–7545	Low potential to occur. Coniferous forest and riparian habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Heuchera caespitosa	urn-flowered alumroot	None/None/4.3/None	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Upper montane coniferous forest; Rocky/perennial rhizomatous herb/May–Aug/3790–8695	Low potential to occur. Coniferous forest is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Heuchera parishii	Parish's alumroot	None/None/1B.3/None	Alpine boulder and rock field, Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; Carbonate (sometimes), Rocky/perennial rhizomatous herb/June–Aug/4920–12470	Not expected to occur. The study area is outside of the species' known elevation range.
Horkelia cuneata var. puberula	mesa horkelia	None/None/1B.1/None	Chaparral, Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Feb–July(Sep)/230–2660	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Hulsea vestita ssp. parryi	Parry's sunflower	None/None/4.3/None	Lower montane coniferous forest, Pinyon and juniper woodland, Upper montane coniferous forest; Carbonate (sometimes), Granitic (sometimes), Openings, Rocky/perennial herb/Apr–Aug/4495–9500	Low potential to occur. Coniferous forest is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Imperata brevifolia	California satintail	None/None/2B.1/None	Chaparral, Coastal scrub, Meadows and seeps, Mojavean desert scrub, Riparian scrub; Mesic/perennial rhizomatous herb/Sep–May/0–3985	Not expected to occur. The study area is outside of the species' known elevation range.

Scientific Name	Common Name	Status (Federal/State/CRPR/Other)	Habitats/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in Study Area
Ivesia argyrocoma var. argyrocoma	silver-haired ivesia	None/None/1B.2/None	Meadows and seeps, Pebble (Pavement) plain, Upper montane coniferous forest/perennial herb/June–Aug/4800–9710	Low potential to occur. The study area is at and below the low elevation range for this species, and although coniferous forest is present, the understory is highly disturbed by ongoing anthropogenic activities. Therefore, the potential for this species to occur within the study area is quite limited.
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland; Openings/perennial bulbiferous herb/Mar–July(Aug)/100–5905	Low potential to occur. Coniferous forest and riparian habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Lilium parryi	lemon lily	None/None/1B.2/None	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; Mesic/perennial bulbiferous herb/July–Aug/4005–9005	Low potential to occur. Coniferous forest and riparian habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Lycium parishii	Parish's desert-thorn	None/None/2B.3/None	Coastal scrub, Sonoran desert scrub/perennial shrub/Mar–Apr/445–3280	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Malacothamnus parishii	Parish's bush-mallow	None/None/1A/None	Chaparral, Coastal scrub/perennial deciduous shrub/June–July/1000–1495	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Monardella exilis	Mojave monardella	None/None/4.2/None	Chenopod scrub, desert dunes, Great Basin scrub, Joshua tree "woodland," lower montane coniferous forest, Mojavean desert scrub, pinyon and juniper woodland; sandy/annual herb/Apr–Sep/1970–6725	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Monardella macrantha ssp. hallii	Hall's monardella	None/None/1B.3/None	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/June–Oct/2395–7200	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Monardella saxicola	rock monardella	None/None/4.2/None	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest; Rocky, Serpentinite (usually)/perennial rhizomatous herb/June–Sep/1640–5905	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Muhlenbergia californica	California muhly	None/None/4.3/None	Chaparral, Coastal scrub, Lower montane coniferous forest, Meadows and seeps; Mesic, Seeps, Streambanks/perennial rhizomatous herb/June–Sep/330–6560	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Nemacladus gracilis	slender nemacladus	None/None/4.3/None	Cismontane woodland, Valley and foothill grassland; Gravelly (sometimes), Sandy (sometimes)/annual herb/Mar–May/395–6235	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status (Federal/State/CRPR/Other)	Habitats/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in Study Area
Opuntia basilaris var. brachyclada	short-joint beavertail	None/None/1B.2/None	Chaparral, Joshua tree "woodland," Mojavean desert scrub, Pinyon and juniper woodland/perennial stem/Apr–June(Aug)/1395–5905	Not expected to occur. No suitable habitat is present.
Pediomelum castoreum	Beaver Dam breadroot	None/None/1B.2/None	Joshua tree "woodland," Mojavean desert scrub; Roadsides, Sandy, Washes/perennial herb/Apr–May/2000–5005	Not expected to occur. No suitable habitat is present.
Pelazoneuron puberulum var. sonorense	Sonoran maiden fern	None/None/2B.2/None	Meadows and seeps/perennial rhizomatous herb/Jan–Sep/165–2000	Not expected to occur. The study area is outside of the species' known elevation range and there is no suitable habitat present.
Pentachaeta aurea ssp. aurea	golden-rayed pentachaeta	None/None/4.2/None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland, Valley and foothill grassland/annual herb/Mar–July/260–6070	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Perideridia parishii ssp. parishii	Parish's yampah	None/None/2B.2/None	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest/perennial herb/June–Aug/4805–9845	Low potential to occur. The study area is at and below the low elevation range for this species, and although coniferous forest is present, the understory is highly disturbed by ongoing anthropogenic activities. Therefore, the potential for this species to occur within the study area is quite limited.
Phacelia exilis	Transverse Range phacelia	None/None/4.3/None	Lower montane coniferous forest, Meadows and seeps, Pebble (Pavement) plain, Upper montane coniferous forest; Gravelly (sometimes), Sandy (sometimes)/annual herb/May–Aug/3610–8860	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Phacelia mohavensis	Mojave phacelia	None/None/4.3/None	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–Aug/4595–8205	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Piperia leptopetala	narrow-petaled rein orchid	None/None/4.3/None	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest/perennial herb/May–July/1245–7300	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Saltugilia latimeri	Latimer's woodland-gilia	None/None/1B.2/None	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland; Granitic (often), Rocky (sometimes), Sandy (sometimes), Washes (sometimes)/annual herb/Mar–June/1310–6235	Not expected to occur. No suitable habitat is present.
Schoenus nigricans	black bog-rush	None/None/2B.2/None	Marshes and swamps/perennial herb/Aug–Sep/490–6560	Not expected to occur. No suitable habitat is present.
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	None/None/1B.2/None	Chaparral, Cismontane woodland, Lower montane coniferous forest; Mesic/perennial rhizomatous herb/June–Aug/1395–6560	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.

Scientific Name	Common Name	Status (Federal/State/CRPR/Other)	Habitats/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur in Study Area
Senecio astephanus	San Gabriel ragwort	None/None/4.3/None	Chaparral, Coastal bluff scrub; Rocky, Slopes/perennial herb/May–July/1310–4920	Not expected to occur. No suitable habitat is present.
Sidalcea malviflora ssp. dolosa	Bear Valley checkerbloom	None/None/1B.2/None	Lower montane coniferous forest, Meadows and seeps, Riparian woodland, Upper montane coniferous forest/perennial herb/May–Aug/4905–8810	Not expected to occur. The study area is outside of the species' known elevation range.
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2/None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; Alkaline, Mesic/perennial herb/Mar–June/50–5020	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Sidotheca caryophylloides	chickweed oxytheca	None/None/4.3/None	Lower montane coniferous forest/annual herb/July–Sep(Oct)/3655–8530	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Streptanthus bernardinus	Laguna Mountains jewelflower	None/None/4.3/None	Chaparral, Lower montane coniferous forest/perennial herb/May–Aug/2200–8205	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Streptanthus campestris	southern jewelflower	None/None/1B.3/None	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; Rocky/perennial herb/(Apr)May–July/2955–7545	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Symphyotrichum defoliatum	San Bernardino aster	None/None/1B.2/None	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Valley and foothill grassland; Streambanks/perennial rhizomatous herb/July–Nov/5–6695	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Symphyotrichum greatae	Greata's aster	None/None/1B.3/None	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; Mesic/perennial rhizomatous herb/June–Oct/985–6595	Low potential to occur. Coniferous forest habitat is present within the study area; however, due to a high level of anthropogenic disturbance the potential for this species to occur is limited.
Syntrichopappus lemmonii	Lemmon's syntrichopappus	None/None/4.3/None	Chaparral, Joshua tree "woodland," Pinyon and juniper woodland; Gravelly (sometimes), Sandy (sometimes)/annual herb/Apr–May(June)/1640–6005	Not expected to occur. No suitable habitat is present.

Status Legend:

Federal

FE: Federally listed as endangered
FT: Federally listed as threatened
FC: Federal Candidate for listing
DL: Delisted

State

SE: State listed as endangered
ST: State listed as threatened
SC: State Candidate for listing
SR: State Rare

California Rare Plant Rank (CRPR)

CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2A: Plants presumed extirpated in California but common elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3: Review List: Plants about which more information is needed
CRPR 4: Watch List: Plants of limited distribution
.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 Moderately threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat)
.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)"

Table B-2: Potentially Occurring Special-Status Wildlife Species

Scientific Name	Common Name	Status (Federal/State/Other)	Habitats	Potential to Occur in Study Area
Bombus crotchii	Crotch bumble bee	None/None/None	Open grassland and scrub communities supporting suitable floral resources.	Not expected to occur. No suitable habitat is present.
Bombus morrisoni	Morrison's bumble bee	None/None/None	Open dry scrub	Not expected to occur. No suitable habitat is present.
Bombus pensylvanicus	American bumble bee	None/None/IUCN_VU-Vulnerable	Coastal prairie | Great Basin grassland | Valley & foothill grassland	Not expected to occur. No suitable habitat is present.
Euchloe hyantis andrewsi	Andrew's marble butterfly	None/None/None	Yellow pine forest; host plants are Laguna Mountains jewel-flower (*Streptanthus bernardinus*) and Holboell's rockcress [*Boechera pinetorum* (*Arabis holboellii* var. *pinetorum*)]	Low potential to occur. Coniferous forest occurs within the project site, but is disturbed due to urbanization and ongoing anthropogenic activities.
Euphydryas editha quino	quino checkerspot butterfly	FE/None/None	Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include Plantago erecta, Antirrhinum coulterianum, and Plantago patagonica (Silverado Occurrence Complex)	Not expected to occur. No suitable habitat is present.
Helminthoglypta taylori	westfork shoulderband	None/None/None	Vicinity of the Mojave River	Not expected to occur. The project site is outside of the known range of the species.
Neolarra alba	white cuckoo bee	None/None/None	Known only from 6 historical localities in Southern California; has not been collected since 1946	Not expected to occur. The only known location is from lower elevations in 1946 (CDFW 2023a).
Palaeoxenus dohrni	Dohrn's elegant eucnemid beetle	None/None/None	Mountainous forests with incense cedar, ponderosa pine, and sugar pine	Moderate potential to occur within the coniferous forest habitat. Reported in the CNDDB in 2018 approximately 1.8 miles northeast of Lake Gregory.
Catostomus santaanae	Santa Ana sucker	FT/None/AFS_TH-Threatened | IUCN_VU-Vulnerable	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. No suitable habitat is present.
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	None/SSC/AFS_TH-Threatened | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. No suitable habitat is present.
Siphateles bicolor mohavensis	Mohave tui chub	FE/FP, SE/AFS_EN-Endangered | CDFW_FP-Fully Protected	Lacustrine ponds or pools; 4 feet min water depth; freshwater flow; mineralized and alkaline environment; habitat for aquatic invertebrate prey and egg attachment substrate; Ruppia maritima preferred for egg attachment and thermal refuge in summer months	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status (Federal/State/Other)	Habitats	Potential to Occur in Study Area
Anaxyrus californicus	arroyo toad	FE/SSC/CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. No suitable habitat is present.
Batrachoseps gabrieli	San Gabriel slender salamander	None/None/IUCN_DD-Data Deficient | USFS_S-Sensitive	Talus slopes in forested areas, often near streams	Not expected to occur. No suitable habitat is present.
Rana draytonii	California red-legged frog	FT, BCC/SSC/CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. The project site is outside of the known range of the species.
Rana muscosa	mountain yellow-legged frog	FE/SE, WL/CDFW_WL-Watch List | IUCN_EN-Endangered | USFS_S-Sensitive	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. No suitable habitat is present.
Spea hammondii	western spadefoot	None/SSC/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Not expected to occur. No suitable habitat is present.
Anniella stebbinsi	southern California legless lizard	None/SSC/CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Not expected to occur. No suitable habitat is present.
Arizona elegans occidentalis	California glossy snake	None/SSC/CDFW_SSC-Species of Special Concern	Arid scrub, rocky washes, grasslands, chaparral, open areas with loose soil	Not expected to occur. No suitable habitat is present.
Aspidoscelis hyperythra	orange-throated whiptail	None/WL/CDFW_WL-Watch List | IUCN_LC-Least Concern | USFS_S-Sensitive	Low-elevation coastal scrub, chaparral, and valley–foothill hardwood	Not expected to occur. No suitable habitat is present.
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC/CDFW_SSC-Species of Special Concern	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Not expected to occur. No suitable habitat is present.
Charina umbratica	southern rubber boa	None/ST/USFS_S-Sensitive	Montane oak–conifer and mixed-conifer forests, montane chaparral, wet meadows; usually in vicinity of streams or wet meadows	Low potential to occur. The study area contains scattered pines and cedar trees that could support this species; however, the site lacks suitable streams or wet meadows and is located in an urbanized area.
Diadophis punctatus modestus	San Bernardino ring-necked snake	None/None/USFS_S-Sensitive	Moist habitats including wet meadows, rocky hillsides, gardens, farmland grassland, chaparral, mixed-conifer forest, and woodland	Low potential to occur due to the disturbed understory within the coniferous forest habitat.

Scientific Name	Common Name	Status (Federal/State/Other)	Habitats	Potential to Occur in Study Area
Emys marmorata	western pond turtle	None/SSC/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Low potential to occur. Lake Gregory provides suitable permanent waters and sandy banks/beaches for basking; however, the current known occurrences of this species from the Mojave River watershed are in Summit Valley, downstream of Silverwood Lake (approximately six miles northwest of Lake Gregory, CDFW 2023a).
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Not expected to occur. Loose, fine sandy soils preferred by this species are not present within the project site.
Thamnophis hammondii	two-striped gartersnake	None/SSC/CDFW_SSC-Species of Special Concern	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Low potential to occur. Suitable habitat is located within the project area; however, the project is located in an urbanized and disturbed area.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None/WL/CDFW_WL-Watch List	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	Not expected to occur. No suitable habitat is present.
Artemisiospiza belli belli	Bell's sage sparrow	None/WL/CDFW_WL-Watch List	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	Not expected to occur. No suitable habitat is present.
Asio otus	long-eared owl	None/SSC/CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats	Not expected to occur. No suitable habitat is present.
Athene cunicularia	burrowing owl	None/SSC/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. No suitable habitat is present.
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT/SE/BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. No suitable habitat is present.
Empidonax traillii extimus	southwestern willow flycatcher	FE/SE/NABCI_RWL-Red Watch List	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status (Federal/State/Other)	Habitats	Potential to Occur in Study Area
Eremophila alpestris actia	California horned lark	None/WL/CDFW_WL-Watch List | IUCN_LC-Least Concern	This subspecies of horned lark occurs on the state's southern and central coastal slope and in the San Joaquin Valley. Nests and forages in grasslands, disturbed lands, agriculture, and beaches.	Not expected to occur. No suitable habitat is present.
Falco columbarius	merlin	None/WL/CDFW_WL-Watch List | IUCN_LC-Least Concern	Forages in semi-open areas, including coastline, grassland, agriculture, savanna, woodland, lakes, and wetlands	Low potential to occur. There is suitable foraging habitat for this species within the project site; however, this species is not expected to nest within the project site.
Haliaeetus leucocephalus	bald eagle	FPD/FP, SE/BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern | USFS_S-Sensitive	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	High potential to occur. This species is likely to forage within the project site; however, there is a low potential to nest. This species has been documented within the project site during previous surveys within the project area, and several records of this species have been recently documented around Lake Gregory (eBird, iNaturalist).
Pandion haliaetus	osprey	None/WL/CDF_S-Sensitive | CDFW_WL-Watch List | IUCN_LC-Least Concern	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast	High potential to occur. This species is likely to forage within the project site; however, there is a low potential to nest. This species has been documented within the project site during previous surveys within the project area, and several records of this species have been recently documented around Lake Gregory (eBird, iNaturalist).
Polioptila californica californica	coastal California gnatcatcher	FT, BCC/SSC/CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. No suitable habitat is present.
Setophaga petechia	yellow warbler	None/SSC/CDFW_SSC-Species of Special Concern	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	High potential to occur. Several records of this species have been recently documented (eBird, iNaturalist).
Vireo bellii pusillus	least Bell's vireo	FE/SE/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | NABCI_YWL-Yellow Watch List | USFS_S-Sensitive	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. Suitable foraging and nesting habitats preferred by this species are not present within the project site.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC/CDFW_SSC-Species of Special Concern	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	Not expected to occur. No suitable habitat is present.

Scientific Name	Common Name	Status (Federal/State/Other)	Habitats	Potential to Occur in Study Area
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None/SSC/CDFW_SSC-Species of Special Concern	Desert wash, desert scrub, desert succulent scrub, and pinyon–juniper woodland	Not expected to occur. No suitable habitat is present.
Dasypterus xanthinus	western yellow bat	None/SSC/None	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Not expected to occur. No suitable habitat is present.
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC, SCE/CDFW_SSC-Species of Special Concern	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	Not expected to occur. No suitable habitat is present.
Eumops perotis californicus	western mastiff bat	None/SSC/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Moderate potential to occur. This species is not expected to roost within the project site due to the lack of exfoliating rock slabs and buildings, but may forage over the site if roosting in the general vicinity.
Glaucomys oregonensis californicus	San Bernardino flying squirrel	None/SSC/CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Coniferous and deciduous forests, including riparian forests	High potential to occur. The study area contains coniferous forest habitat that could be suitable for this species. Several recent records are documented on iNaturalist.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	BCC/SSC/None	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Not expected to occur. No suitable habitat is present.
Neotamias speciosus speciosus	lodgepole chipmunk	None/None/None	Open-canopy forests of mixed conifer; Jeffrey, lodgepole, and limber pine, and occasionally in chaparral. Elevational range in the southern California mountains is 6400-10900 ft.	Not expected to occur. The project site is outside of the elevational range of this species.
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC/CDFW_SSC-Species of Special Concern	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur. No suitable habitat is present.
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC/CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_M-Medium Priority	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur. No suitable habitat is present.
Perognathus alticola alticola	white-eared pocket mouse	None/SSC/BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | USFS_S-Sensitive	Arid ponderosa pine communities	Not expected to occur. The study area contains scattered pine trees that could be suitable for this species; however, the study area is urbanized without sufficient understory vegetation to support this species.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None/SSC/CDFW_SSC-Species of Special Concern	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	Not expected to occur. No suitable habitat is present.
Taxidea taxus	American badger	None/SSC/IUCN_VU-Vulnerable	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. No suitable habitat is present.

Status Legend:

Federal

FE: Federally listed as endangered
FT: Federally listed as threatened
FPE: Federally proposed for listing as endangered
PFT: Federally proposed for listing as threatened
FC: Federal candidate species (former Category 1 candidates)
FPD: Federally proposed for delisting
BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
BLM: Bureau of Land Management Sensitive Species
USFS: U.S. Forest Service Sensitive Species
DL: Delisted

State

SE: State listed as endangered
ST: State listed as threatened
SCE: State candidate for listing as endangered
SCT: State candidate for listing as threatened
SCD: State candidate for delisting
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
CDF: California Department of Forestry Sensitive Species

ATTACHMENT C

SITE PHOTOGRAPHS

Photograph 1: Looking northwest towards the swim beach from the southern parking lot shore.

Photograph 2. Typical inlet found around the perimeter of the project site.

Photograph 3: View facing towards Lake Gregory depicting the typical conditions along the flow path from one of the inlets that surround Lake Gregory.

Photograph 4: North facing view of Lake Gregory from the north end of the San Moritz Channel.

Photograph 5: South facing view along the San Moritz Channel from the north end.

Photograph 6: Standing on the southern shore of Lake Gregory looking to the north and across the South Basin.

Photograph 7: Standing on the southern shore of Lake Gregory looking to the west and across the South Basin and towards the mouth of the San Moritz Channel.

Photograph 8: Standing along the northern shore of Lake Gregory looking to the west depicting the typical conditions along the northern shore.

Photograph 9: Standing on the western shore of the Lake Gregory looking to the northeast towards the northern portion of the Swim Beach.

Photograph 10: Standing on the western shore of the Lake Gregory looking to the southeast towards the southern portion of the Swim Beach.

Photograph 11: View looking to the east across the Library Basin to the immediate west of Lake Gregory in the western portion of the project site.

Photograph 12: View of the sediment storage area, Camp Switzerland, in the northern portion of the project site.

Appendix D – Aquatic Resources Delineation Report

Michael Baker INTERNATIONAL

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JN 195651

AQUATIC RESOURCES DELINEATION REPORT

LAKE GREGORY REGIONAL PARK SITEWIDE SEDIMENT MANAGEMENT PROJECT

Unincorporated Community of Crestline,
County of San Bernardino, California

Prepared for:
County of San Bernardino
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March 6, 2024

LAKE GREGORY REGIONAL PARK SITEWIDE SEDIMENT MANAGEMENT PROJECT

UNINCORPORATED COMMUNITY OF CRESTLINE, COUNTY OF SAN BERNARDINO, CALIFORNIA

Aquatic Resources Delineation Report

The undersigned certify that this report is a complete and accurate account of the findings and conclusions of jurisdictional wetland and non-wetland "waters of the U.S.," "waters of the State," and streambed/banks and associated riparian vegetation delineation for the above-referenced project.

John R. Parent

John Parent
Biologist/Regulatory Specialist
Natural Resources and Regulatory Permitting

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Stephen Anderson
Biologist/Regulatory Specialist
Natural Resources and Regulatory Permitting

March 6, 2024

JN 195651

EXECUTIVE SUMMARY

On behalf of San Bernardino County Regional Parks, Michael Baker International (Michael Baker) has prepared this Aquatic Resources Delineation Report for the proposed Lake Gregory Regional Park Sitewide Sediment Management Project (project or project site) located in the unincorporated community of Crestline within San Bernardino County, California. Michael Baker conducted an aquatic resources delineation on October 12, 2023.

The proposed project is a restoration/improvement project for near-term sediment removal and an ongoing maintenance program of sediment removal to improve the lake's beneficial uses. The proposed project's objectives are to establish a plan for routine maintenance of the lake to improve water clarity and quality, enhance recreational features, and improve fishery habitat resources. The County proposes to continue maintenance activities on a year-round basis with seasonal restrictions on certain activities. This project is a continuation and improvement of historic sediment management activities at Lake Gregory.

This report documents the aquatic resources identified by Michael Baker within the project site that are potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and/or the California Porter-Cologne Water Quality Control Act, and the California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600 et seq. of the California Fish and Game Code (CFGC).

State and federal jurisdictional areas were identified within the project site. Table ES-1, *Aquatic Resource Jurisdictional Limits Within the Project Site,* identifies the total jurisdiction for each regulatory agency. Delineation methods followed the most recent, acceptable guidelines for conducting an aquatic resources delineation in this region; however, only the regulatory agencies can make a final determination of jurisdictional limits.

Features identified within the project area are subject to USACE, RWQCB, and CDFW regulatory authority and would require authorization prior to the commencement of construction in areas identified as jurisdictional. Based on a detailed review of current site conditions and project design plans, the following regulatory permits/authorizations would be required prior to construction within the identified jurisdictional areas:

- USACE Section 404 permit for impacts associated with the placement of dredge and/or fill material into waters of the U.S. (WoUS) under the CWA.
- RWQCB Section 401 Water Quality Certification (WQC) for impacts associated with the placement of dredge and/or fill material into WoUS pursuant to the Porter-Cologne Act and CWA.
- CDFW Section 1602 Lake or Streambed Alteration Agreement (or other approval in lieu of a formal agreement such as an Operation-of-Law letter) for alteration to lakes, streambed/banks, and/or associated riparian vegetation.

TABLE ES-1. AQUATIC RESOURCE JURISDICTIONAL LIMITS WITHIN THE PROJECT SITE

Feature Name	Cowardin Class	Aquatic Feature Class	Acreage (Linear Feet)						
			USACE		RWQCB		CDFW		
			Non-Wetland WoUS	Wetland WoUS	Non-Wetland WoS	Wetland WoS	Lake	Streambed	Riparian
Lake Gregory	Lacustrine	Non-Wetland	77.98 (N/A)	0.00 (0)	77.98 (N/A)	0.00 (0)	77.98 (N/A)	0.00 (0)	0.29
Library Basin	Riverine	Wetland	0.00 (0)	0.41 (235)	0.00 (0)	0.41 (235)	0.00 (0)	0.41 (235)	0.00
San Moritz Channel Basins	Lacustrine	Non-Wetland	0.79 (993)	0.00 (0)	0.79 (993)	0.00 (0)	0.00 (0)	1.18 (993)	0.00
Inlet 1	Riverine	Non-Wetland	0.0002 (5)	0.00 (0)	0.0002 (5)	0.00 (0)	0.00 (0)	0.0002 (5)	0.00
Inlet 2	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 3	Not observed, assumed direct connection to Lake		N/A,	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 4	Riverine	Non-Wetland	0.004 (83)	0.00 (0)	0.004 (83)	0.00 (0)	0.00 (0)	0.003 (83)	0.00
Inlet 5	Riverine	Non-Wetland	0.003 (48)	0.00 (0)	0.003 (48)	0.00 (0)	0.00 (0)	0.003 (48)	0.00
Inlet 6	Riverine	Non-Wetland	0.005 (70)	0.00 (0)	0.005 (70)	0.00 (0)	0.00 (0)	0.004 (70)	0.00
Inlet 7	Observed, included with San Moritz Channel		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 8	Riverine	Non-Wetland	0.039 (344)	0.00 (0)	0.039 (344)	0.00 (0)	0.00 (0)	0.039 (344)	0.00
Inlet 9a	Riverine	Non-Wetland	0.002 (47)	0.00 (0)	0.002 (47)	0.00 (0)	0.00 (0)	0.002 (47)	0.00
Inlet 9b	Not observed, assumed direct connection to Lake N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 10	Riverine	Non-Wetland	0.002 (75)	0.00 (0)	0.002 (75)	0.00 (0)	0.00 (0)	0.002 (75)	0.00
Inlet 11	Riverine	Non-Wetland and Wetland	0.002 (19)	0.12 (109)	0.115 (109)	0.12 (109)	0.00 (0)	0.115 (109)	0.00

TABLE ES-1, CONTINUED

Feature Name	Cowardin Class	Aquatic Feature Class	Acreage (Linear Feet)						
			USACE		RWQCB		CDFW		
			Non-Wetland WoUS	Wetland WoUS	Non-Wetland WoS	Wetland WoS	Lake	Streambed	Riparian
Inlet 12	Riverine	Non-Wetland	0.005 (103)	0.00 (0)	0.005 (103)	0.00 (0)	0.00 (0)	0.005 (103)	0.00
Inlet 13	Riverine	Non-Wetland	0.006 (125)	0.00 (0)	0.006 (125)	0.00 (0)	0.00 (0)	0.006 (125)	0.00
Inlet 14	Riverine	Non-Wetland	0.002 (44)	0.00 (0)	0.002 (44)	0.00 (0)	0.00 (0)	0.002 (44)	0.00
Inlet 15	Observed, not jurisdictional		0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Inlet 16	Riverine	Non-Wetland	0.002 (36)	0.00 (0)	0.002 (36)	0.00 (0)	0.00 (0)	0.002 (36)	0.00
Inlet 17	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 18	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 19	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 20	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 21	Riverine	Non-Wetland	0.005 (29)	0.00 (0)	0.005 (29)	0.00 (0)	0.00 (0)	0.005 (29)	0.00
Inlet 22	Observed, not jurisdictional		0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Inlet 23	Riverine	Non-Wetland	0.0001 (5)	0.00 (0)	0.0001 (5)	0.00 (0)	0.00 (0)	0.0001 (5)	0.00
Inlet 24	Riverine	Non-Wetland	0.0006 (9)	0.00 (0)	0.0006 (9)	0.00 (0)	0.00 (0)	0.0006 (9)	0.00
Spillway 25	Riverine	Non-Wetland	0.0008 (18)	0.00 (0)	0.0008 (18)	0.00 (0)	0.00 (0)	0.0008 (18)	0.00
Inlet 26	Not observed, underground, outlets to #25		N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE ES-1, CONTINUED

Feature Name	Cowardin Class	Aquatic Feature Class	Acreage (Linear Feet)						
			USACE		RWQCB		CDFW		
			Non-Wetland WoUS	Wetland WoUS	Non-Wetland WoS	Wetland WoS	Lake	Streambed	Riparian
Inlet 27	Not observed, underground, outlets to #25		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 28	Riverine	Non-Wetland	0.0004 (10)	0.00 (0)	0.0004 (10)	0.00 (0)	0.00 (0)	0.0004 (10)	0.00
Inlet 29	Riverine	Non-Wetland	0.0004 (8)	0.00 (0)	0.0004 (8)	0.00 (0)	0.00 (0)	0.0004 (8)	0.00
Inlet 30	Riverine	Non-Wetland	0.00009 (4)	0.00 (0)	0.00009 (4)	0.00 (0)	0.00 (0)	0.00009 (4)	0.00
Inlet 31	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 32	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 33	Observed, outlets directly into Lake, not jurisdictional		0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
AF- 1	Riverine	Non-Wetland	0.002 (37)	0.00 (0)	0.002 (37)	0.00 (0)	0.00 (0)	0.002 (37)	0.00
		TOTAL	**78.85 (2,112)**	**0.53 (344)**	**78.85 (2,112)**	**0.53 (344)**	**77.98**	**1.78 (2,437)**	**0.29**

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ACRONYMS AND ABBREVIATIONS

amsl ..... above mean sea level
CDFW ..... California Department of Fish and Wildlife
CEQA ..... California Environmental Quality Act
CFGC ..... California Fish and Game Code
CMP ..... corrugated metal pipes
CPP ..... corrugated plastic pipes
CWA ..... Clean Water Act
DBH ..... diameter at breast height
EPA ..... U.S. Environmental Protection Agency
F ..... Fahrenheit
FAC ..... Facultative
FACW ..... Facultative Wetland
GPS ..... Global Positioning System
in/hr ..... inches per hour
LSAA ..... Lake and Streambed Alteration Agreement
Michael Baker ..... Michael Baker International
OBL ..... Obligate Wetland
OHWM ..... ordinary high-water mark
Porter-Cologne Act ..... California Porter-Cologne Water Quality Control Act
Procedures ..... State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State
Project ..... Lake Gregory Regional Park Sitewide Sediment Management Project
Regional Parks ..... San Bernardino County Regional Parks
Regional Supplement ..... Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0
Revised Definition ..... Revised Definition of "Waters of the United States," Conforming
RWQCB ..... Regional Water Quality Control Board
TNW ..... Traditional Navigable Water
UPL ..... Obligate Upland
USACE ..... U.S. Army Corps of Engineers
USDA ..... U.S. Department of Agriculture, Natural Resources Conservation Service
USFWS ..... U.S. Fish and Wildlife Service
USGS ..... U.S. Geological Survey
WoUS ..... waters of the U.S.
WQC ..... Water Quality Certification

SECTION 1 INTRODUCTION

On behalf of San Bernardino County Regional Parks (Regional Parks), Michael Baker International (Michael Baker) has prepared this Aquatic Resources Delineation Report to describe, map, and quantify aquatic features for the approximately 132-acre Lake Gregory Regional Park Sitewide Sediment Management Project site.

This report describes the regulatory setting, methods, and results of the aquatic resources delineation. This report presents Michael Baker's best professional effort at determining the jurisdictional boundaries using the most up-to-date regulations, written policy, and guidance from the regulatory agencies; however, only the regulatory agencies can make a final determination of jurisdictional limits.

1.1 PROJECT LOCATION

Lake Gregory is located at 24171 Lake Drive in the unincorporated community of Crestline, San Bernardino County, California (Figure 1, *Regional Vicinity*). Specifically, the project site is within Section 23 of Township 2 South, Range 4 West of the U.S. Geological Survey's (USGS) San Bernardino North, California 7.5-minute topographic quadrangle (USGS 2023; Figure 2, *Project Vicinity*). The project site is generally east of Highway 138 and north of Highway 18 (Figure 3, *Project Site*).

1.2 PROJECT DESCRIPTION

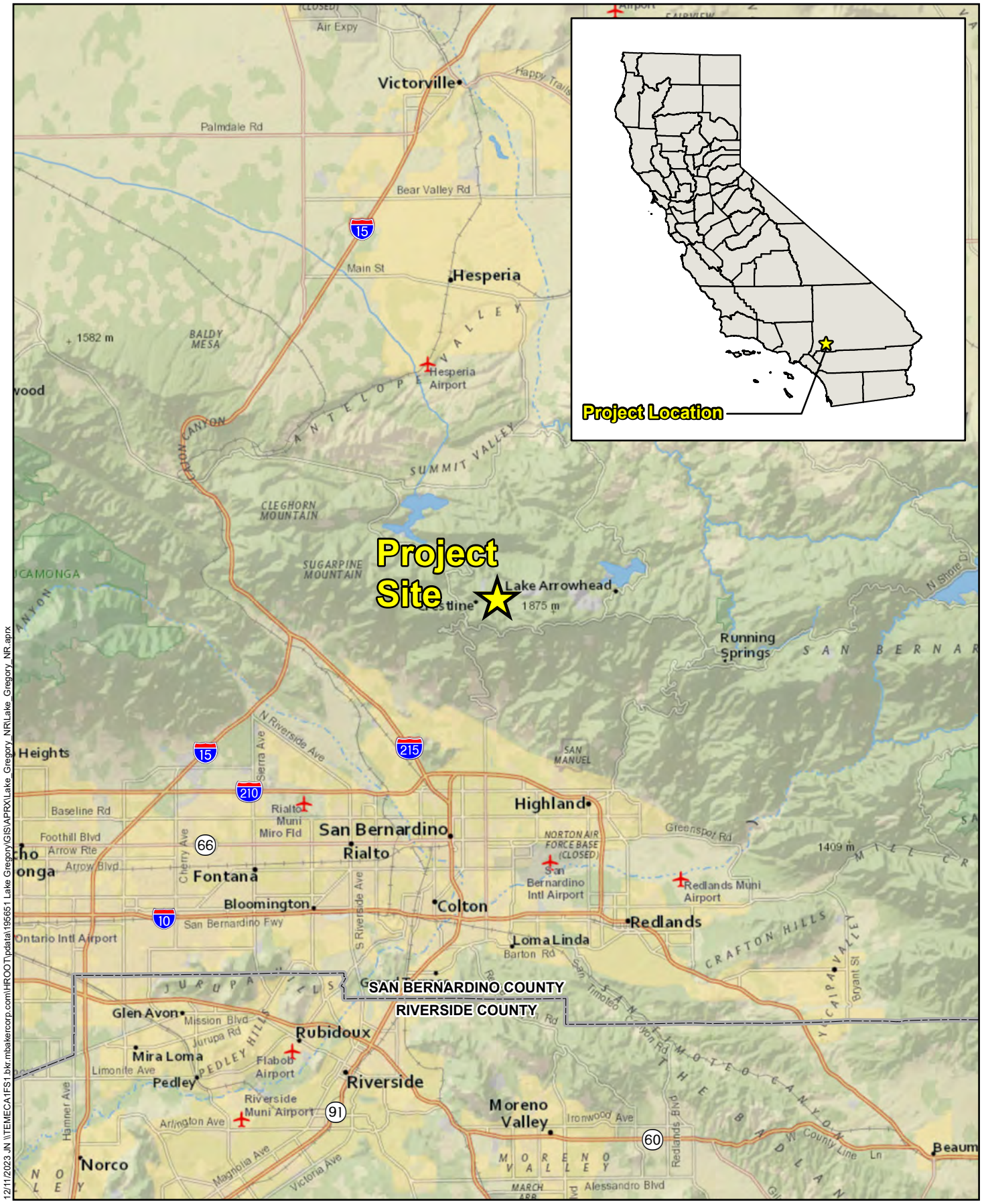
The proposed project includes both the construction of improvements and routine maintenance elements. The construction of various improvements is necessary to improve recreational features and infrastructure supporting Lake Gregory Regional Park, primarily for water quality, recreational purposes, and public safety. This project is a continuation of the 2019 Lake Gregory Sediment Management and Bio-Retention Project (Dudek 2019a).

The construction of improvements includes the following actions:

- Improvement to the Swim Beach area including dredging, regrading, and placement of a permanent in-water barrier.
- Improvements to South Beach including dredging and regrading.
- Improvement to most of the inlet locations around the lake perimeter with the addition of headwall structures and rip rap at some locations.
- Re-construction and enhancement of an ephemeral channel (San Moritz Channel Basins).

Maintenance includes the following actions:

- On-going sediment management and removal of existing and future sediment accumulation.
- Routine maintenance of Lake Gregory, San Moritz Channel Basins, and Library Basin, including Lake Gregory beach grading, lake and basin structural repairs and debris/trash removal, inlet/outlet repairs, access road and appurtenant structure repairs, slope repairs, maintenance of lake water surface/water quality operational standards, and vector control.



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LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

Regional Vicinity

Michael Baker INTERNATIONAL

0 2.5 5 Miles

Source: ArcGIS Online, 2018

Figure 1

12/11/2023 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

Project Site

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

Project Vicinity

Michael Baker INTERNATIONAL

0 0.5 1 Miles

Source: USGS 7.5-Minute topographic quadrangle maps: *Harrison Mountain, Lake Arrowhead, San Bernardino North, and Silverwood Lake, California (2021)*

Figure 2

12/11/2023 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

Project Site

Reference Point

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

Project Site

Figure 3

SECTION 2 REGULATIONS

Three agencies regulate activities affecting inland streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (USACE) Regulatory Division regulates activities pursuant to Section 404 of the federal Clean Water Act (CWA). Of the state agencies, the California Department of Fish and Wildlife (CDFW) regulates activities under Sections 1600 et seq. of the California Fish and Game Code (CFGC), and the Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401 of the CWA and/or the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

2.1 U.S. ARMY CORPS OF ENGINEERS

Since 1972, the USACE and U.S. Environmental Protection Agency (EPA) have jointly regulated discharges of dredged or fill material into "waters of the U.S." (WoUS), including wetland and non-wetland aquatic features, pursuant to Section 404 of the CWA. On September 8, 2023, the EPA and the USACE published the *Revised Definition of "Waters of the United States," Conforming* (Revised Definition) in the Federal Register to redefine WoUS and align the regulatory text with key aspects of the U.S. Supreme Court's decision under *Sackett v. EPA*. Notable changes under the Revised Definition include the requirement that tributaries demonstrate relatively permanent, standing, or continuously flowing water; and the requirement that adjacent wetlands demonstrate "a continuous surface connection." Guidance from the USACE regarding these recent changes is forthcoming. The USACE's definition of WoUS is provided in full at 33 CFR 328.3.

2.2 REGIONAL WATER QUALITY CONTROL BOARD

Applicants for a federal license or permit for activities that may discharge to WoUS must seek a Water Quality Certification (WQC) from the state or Indian tribe with jurisdiction.[1] In California, there are nine RWQCBs that issue or deny certification for discharges within their geographical jurisdiction. Such certification is based on a finding that the discharge will meet water quality standards, which are defined as numeric and narrative objectives in each RWQCB's Basin Plan, and other applicable requirements. The State Water Resources Control Board has this responsibility for projects affecting waters within multiple RWQCBs. The RWQCBs' jurisdiction extends to all WoUS, including wetlands, and to non-federal waters of the State (described below).

The Porter-Cologne Act gives the state broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. Generally, if there is no continuous surface connection to a Traditional Navigable Water (TNW), any person proposing to discharge waste into waters of the State that could affect its water quality must file a Report of Waste Discharge. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB also interprets this to include fill discharged into water bodies.

[1] Title 33, United States Code, Section 1341; Clean Water Act Section.

On April 2, 2019, the State Water Resources Control Board adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming *Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California*. The Procedures consist of four major elements:

1) a wetland definition;
2) a framework for determining if a feature that meets the wetland definition is a water of the State;
3) wetland delineation procedures; and
4) procedures for the submittal, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

The Procedures were approved by the Office of Administrative Law on August 28, 2019, and became effective May 28, 2020.

2.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Sections 1600 et seq. of the CFGC establishes a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely affect fish and wildlife resources, or when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Section 1602 of the CFGC requires any person, state, or local governmental agency or public utility to notify CDFW before beginning any activity that will do one or more of the following:

(1) Substantially obstruct or divert the natural flow of a river, stream, or lake.
(2) Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake.
(3) Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

This applies to all perennial, intermittent, and ephemeral rivers, streams, lakes, and associated riparian vegetation in the state, including the maintenance of existing drain culverts, outfalls, and other structures.

SECTION 3 METHODS

This report is supported by a desktop analysis and field delineation conducted on October 12, 2023, by qualified wetland surveyors and regulatory specialists John Parent and Stephen Anderson. A field delineation was conducted to determine the jurisdictional limits of WoUS and waters of the State (including potential wetlands), located within the boundaries of the project site.

3.1 DESKTOP ANALYSIS

Prior to the field delineation, Michael Baker thoroughly reviewed relevant literature and materials to obtain a general understanding of the environmental setting and to preliminarily identify features/areas within the project site that may fall under the jurisdiction of the regulatory agencies. Background information and sources consulted included a watershed review, local climate, USGS 7.5-minute topographic quadrangle map, aerial photography, soil survey maps, flood zones, and hydrography datasets. Section 4 has a summary of each source that was reviewed.

3.2 FIELD DELINEATION

Following the initial data collection, Michael Baker wetland delineators conducted an on-site delineation of the study area using the most recent, agency-approved methods to identify and map the extent of federal and state jurisdictional features (i.e., wetland and non-wetland WoUS, waters of the State, streambed, riparian vegetation). While in the field, jurisdictional features were recorded on an aerial base map at a scale of 1:1,200 (1”=100’) using topographic contours and visible landmarks as guidelines. Data points were obtained with a Garmin Map 64 Global Positioning System (GPS) as well as a handheld Android device with GPS capabilities to record and identify specific widths for ordinary high-water mark (OHWM) indicators and the locations of photographs, soil pits, and other pertinent jurisdictional features. These data were then transferred as a .shp file and added to the report’s jurisdictional figures. The jurisdictional figures were prepared using ESRI ArcMap Version 10 software and comply with the USACE’s Minimum Standards for Acceptance of Aquatic Resource Delineations (USACE 2016).

3.3 WATERS OF THE U.S.

3.3.1 Non-Wetland Waters of the U.S.

The limits of the USACE’s jurisdiction in non-tidal waters extend to the OHWM, which is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”[2] An OHWM can be determined by the observation of a natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; presence of litter and debris; wracking; vegetation matted down, bent, or absent; sediment

[2] 33 Code of Federal Regulations §328.3(e), Clean Water Act regulations.

sorting; leaf litter disturbed or washed away; scour; deposition; multiple observed flow events; bed and banks; water staining; and/or change in plant community. The RWQCB generally shares the USACE jurisdictional methodology.

3.3.2 Wetland Waters of the U.S.

For this project location, jurisdictional wetlands were delineated using the methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0* (Regional Supplement; USACE 2008). This document is part of a series of regional supplements to the *1987 Corps Wetland Delineation Manual*. According to the Regional Supplement, identification of wetlands is based on a three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. To be considered a wetland, an area must exhibit at least minimal characteristics within these three parameters. The Regional Supplement presents wetland indicators, delineation guidance, and other information that is specific to the Arid West Region. In the field, vegetation, soils, and evidence of hydrology have been examined using the methodology listed below and documented on USACE wetland determination data forms, when applicable.

Vegetation

Nearly 5,000 plant types in the United States may occur in wetlands. These plants, referred to as hydrophytic vegetation, are listed in the National Wetland Plant List by the USACE. In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season. Vegetation strata are sampled separately when evaluating indicators of hydrophytic vegetation. A stratum for sampling purposes is defined as having five percent or more total plant cover. The following vegetation strata are recommended for use across the Arid West Region:

- *Tree Stratum:* Consists of woody plants 3 inches or more in diameter at breast height (DBH).
- *Sapling/shrub Stratum:* Consists of woody plants less than 3 inches in DBH, regardless of height.
- *Herb Stratum:* Consists of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size.
- *Woody Vines:* Consists of all woody vines, regardless of size.

The following indicator is applied per the test method below.[3] Hydrophytic vegetation is present if any of the indicators are satisfied.

[3] Although the Dominance Test is utilized in most wetland delineations, other indicator tests may be employed. If one indicator of hydric soil and one primary or two secondary indicators of wetland hydrology are present, then the Prevalence Test (Indicator 2) may be performed. If the plant community satisfies the Prevalence Test, then the vegetation is hydrophytic. If the Prevalence Test fails, then the Morphological Adaptation Test may be performed, where the delineator analyzes the vegetation for potential morphological features.

Indicator 1 – Dominance Test

Cover of vegetation is estimated and is ranked according to their dominance. Species that contribute to a cumulative total of 50 percent of the total dominant coverage, plus any species that comprise at least 20 percent (also known as the "50/20 rule") of the total dominant coverage, are recorded on a wetland determination data form. Wetland indicator status is assigned to each species using The National Wetland Plant List, version 3.4 (USACE 2018). If greater than 50 percent of the dominant species from all strata are Obligate Wetland, Facultative Wetland, or Facultative species, the criteria for wetland vegetation is considered to be met. Plant indicator status categories are described below:

- *Obligate Wetland (OBL):* Plants that occur almost always in wetlands under natural conditions, but which may also occur rarely in non-wetlands.
- *Facultative Wetland (FACW):* Plants that occur usually in wetlands, but also occur in non-wetlands.
- *Facultative (FAC):* Plants with similar likelihood of occurring in both wetlands and non-wetlands.
- *Facultative Upland (FACU):* Plants that occur sometimes in wetlands, but occur more often in non-wetlands.
- *Obligate Upland (UPL):* Plants that occur rarely in wetlands but occur almost always in non-wetlands under natural conditions.

Hydrology

Wetland hydrology indicators are presented in four groups:

- *Group A – Observation of Surface Water or Saturated Soils*

  Group A is based on the direct observation of surface water or groundwater during the site visit.

- *Group B – Evidence of Recent Inundation*

  Group B consists of evidence that the site is subject to flooding or ponding, although it may not be inundated currently. These indicators include water marks, drift deposits, sediment deposits, and similar features.

- *Group C – Evidence of Recent Soil Saturation*

  Group C consists of indirect evidence that the soil was saturated recently. Some of these indicators, such as oxidized rhizospheres surrounding living roots and the presence of reduced iron or sulfur in the soil profile, imply that the soil has been saturated for an extended period.

- *Group D – Evidence from Other Site Conditions or Data*

  Group D consists of vegetation and soil features that indicate contemporary rather than historical wet conditions and include shallow aquitard and the FAC-neutral test.

If wetland vegetation criteria are met, the presence of wetland hydrology is evaluated at each transect by recording the extent of observed surface flows, depth of inundation, depth to saturated soils, and depth to free water in the soil test pits. The lateral extent of the hydrology indicators is used as a guide for locating soil pits for evaluation of hydric soils and jurisdictional areas. In portions of the stream where the flow is divided by multiple channels with intermediate sand bars, the entire area between the channels is considered within the OHWM and the wetland hydrology indicator is considered met for the entire area.

Soils

A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper 16-20 inches.[4] The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. If any hydric soil features are located, progressive pits are dug moving laterally away from the active channel until hydric features are no longer present within the top 20 inches of the soil profile.

Once in the field, soil characteristics are verified by digging soil pits along each transect to an excavation depth of 20 inches; in areas of high sediment deposition, soil pit depth may be increased. Soil pit locations are usually placed within the drainage invert or within adjoining vegetation. At each soil pit, the soil texture and color are recorded by comparison with standard plates within a Munsell Soil Chart (Munsell Color 2012). Munsell Soil Charts aid in designating color labels to soils, based by degrees of three simple variables—hue, value, and chroma. Any indicators of hydric soils, such as organic accumulation, iron reduction, translocation, accumulation, and sulfate reduction, are also recorded.

Hydric soil indicators are present in three groups:

- *All Soils*

  "All soils" refers to soils with any U.S. Department of Agriculture, Natural Resources Conservation Service (USDA) soil texture. Hydric soil indicators in this group include histosol, histic epipedon, black histic, hydrogen sulfide, stratified layers, 1-centimeter muck, depleted below dark surface, and thick dark surface.

- *Sandy Soils*

  "Sandy soils" refers to soil materials with a USDA soil texture of loamy fine sand and coarser. Hydric soil indicators in this group include sandy mucky mineral, sandy gleyed matrix, sandy redox, and stripped matrix.

[4] According to the Regional Supplement (USACE 2008), growing season dates are determined through on-site observations of the following indicators of biological activity in a given year: (1) aboveground growth and development of vascular plants, and/or (2) soil temperature.

- *Loamy and Clayey Soils*

  "Loamy and clayey soils" refers to soil materials with a USDA soil texture of loamy very fine sand and finer. Hydric soil indicators in this group include loamy mucky mineral, loamy gleyed matrix, depleted matrix, redox dark surface, depleted dark surface, redox depressions, and vernal pools.

3.4 WATERS OF THE STATE

The RWQCB's jurisdiction is mapped similarly to the USACE, by defining an OHWM and utilizing the three-parameter approach for wetlands, as described above. In the case where the waterbody is not a WoUS, the RWQCB considers such waterbodies to be jurisdictional waters of the State. The 2019 Procedures adopted by the State Water Resources Control Board contain a wetland definition and wetland delineation procedures. The state wetland definition and delineation procedures are largely consistent with the three-parameter approach, involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology, implemented by the USACE and outlined in the 2010 Regional Supplement. One exception, however, is that an area can lack vegetation and still qualify as a wetland water of the State if it satisfies both the hydric soil and wetland hydrology parameters.

3.5 STREAMBED AND ASSOCIATED RIPARIAN HABITAT

CDFW jurisdiction applies to all perennial, intermittent, and ephemeral rivers, streams, lakes, and associated riparian vegetation in the State of California. CDFW regulatory authority extends to include riparian habitat (including adjacent wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils or saturated soil conditions. Generally, CDFW jurisdiction is mapped to the top of the active bank of the stream or to the outer drip line of the associated riparian vegetation, whichever is greater. For Lake and Streambed Alteration Agreement (LSAA) notification purposes, vegetated and non-vegetated streambed are distinguished when riparian vegetation is present.

SECTION 4 RESULTS

4.1 DESKTOP ANALYSIS

Michael Baker thoroughly reviewed relevant literature and materials to preliminarily identify areas that may fall under the jurisdiction of the regulatory agencies. This section and Appendix A, *Documentation,* summarize the materials used during the literature review. In addition, Section 7, *References*, has a complete list of references used throughout the course of this delineation.

4.1.1 Watershed Review

The project site is located within the Silverwood Lake - West Fork Mojave River (Hydrologic Unit Code 180902080201) sub-watershed of the larger West Fork Mojave River watershed (Hydrologic Unit Code 18090208). The EPA assessed Lake Gregory as an Impaired Waterbody, identified with mercury and chlordane. The Mojave River watershed is located in Southern California, extending from the San Bernardino Mountains in San Bernardino County to the northeast and ending at Soda Lake, a dry lakebed in the Mojave Desert.

The project site occurs within Lake Gregory, which outlets to Houston Creek, is tributary to Trinity River, and flows into Silverwood Lake. Silverwood Lake outlets into the West Fork Mojave River, which is ultimately tributary to the Mojave River, a TNW.

4.1.2 Local Climate

Lake Gregory is located within the San Bernardino Mountains and has a semi-arid climate characterized by moderate annual rainfall with long hot summers and cool wet winters. Lake Arrowhead, which is located 4.8 miles east of Lake Gregory and is of a similar elevation, has an average minimum temperature of 28.9 degrees Fahrenheit (F) annually, and an average maximum temperature of 81.9 degrees F annually (Western Regional Climate Center 2023). The warmest months on average are July and August, at a maximum of 81.9 degrees F, and the coolest month on average is January at a minimum of 28.9 degrees F. Most precipitation occurs between November and March in the form of rain and snow, with occasional and steadily increasing precipitation through the fall and winter; the average total precipitation is 40.04 inches annually. Average total snowfall is 47.7 inches annually.

4.1.3 USGS 7.5-Minute Topographic Quadrangle

The project site is located within the unincorporated community of Crestline, within the San Bernardino Mountains, San Bernardino County, California (Figure 1, *Regional Vicinity*). Specifically, the project site is within Section 23 of Township 2 South, Range 4 West San Bernardino Meridian in the USGS San Bernardino North, California 7.5-minute topographic quadrangle (USGS 2023; Figure 2, *Project Vicinity*). The site is an artificially constructed lake with the surrounding topography sloping towards the lake. On-site elevations range from approximately 4,520 to 4,800 feet above mean sea level (amsl).

4.1.4 Aerial Photograph

Prior to the field visits, Michael Baker reviewed multiple aerial photographs from Google Earth for the project site, including images dated May 21, 2023, and June 06, 2022 (Google, Inc. 2023). Aerial photographs can be useful during the delineation process, as the photographs often indicate the presence of drainages and riparian vegetation within the boundaries of the project site. Based on the aerial imagery, the project site is composed primarily of open water surrounded by developed land with transportation use including Lake Drive and Lake Gregory Drive. Houston Creek is the main feature flowing into Lake Gregory from the southeast and out of the lake to the northeast. Ornamental vegetation and pine woodland habitat consistent with the surrounding area is noted throughout the project site. The project is primarily surrounded by developed land in all directions.

4.1.5 Soil Survey

Soils within the project site were researched prior to the field delineation using the *Custom Soil Resource Report for San Bernardino National Forest Area, California* (USDA 2023; Appendix A, *Documentation*). The presence of hydric soils is initially investigated by comparing the mapped soil series for the site to the County list of hydric soils. Soil surveys furnish soil maps and interpretations originally needed to provide technical assistance to farmers and ranchers; in guiding other decisions about soil selection, use, and management; and in planning, research, and disseminating the results of the research. In addition, soil surveys are now heavily utilized to obtain soil information with respect to potential wetland environments and jurisdictional areas (i.e., soil characteristics, drainage, and color). The soil series described below have been reported on-site.

Cedarpines-Stargazer-Urban land complex, 15 to 50 percent slopes (106)

The Cedarpines-Stargazer series consists of well-drained soils with parent material of colluvium and/or residuum weathered from granitoid. These soils are found on mountain slopes, with an elevation for this map unit at 4,330 to 6,460 feet. Mean annual precipitation is 26 to 41 inches. The mean annual air temperature is 52 to 55 degrees F with a frost-free period of 150 to 200 days.

In a typical profile of the Cedarpines series, 0 to 5 inches is cobbly sandy loam, 5 to 20 inches is cobbly sandy loam, 20 to 24 inches is extremely cobbly sand, and 24 to 39 inches is bedrock. The depth to the restrictive feature is 24 inches, and the depth to water table is more than 80 inches. This soil drainage class is well drained with no flooding and no ponding as identified in the soil survey. The available water capacity is low to moderately low (0.00 to 0.06 in/hr).

In a typical profile of the Stargazer series, 0 to 3 inches is moderately decomposed plant material, 3 to 16 inches is sandy loam, 16 to 28 inches is clay loam, 28 to 51 inches is loam, and 51 to 61 inches is bedrock. The depth to the restrictive feature is 39 to 69 inches, and the depth to water table is more than 80 inches. This soil drainage class is well drained with no flooding and no ponding as identified in the soil survey. The available water capacity is very low to moderately low (0.00 to 0.06 in/hr).

The map unit composition consists of minor components of Heapspeak (5%), Canyonspring (5%), and Runningspring (5%).

Cedarpines-Stargazer-Urban land complex, 30 to 50 percent slopes (107)

The Cedarpines-Stargazer series consists of well drained soils with parent material of colluvium and/or residuum weathered from granitoid. These soils are found on mountain slopes, with an elevation for this map unit at 4,350 to 6,980 feet. Mean annual precipitation is 26 to 41 inches. The mean annual air temperature is 52 to 55 degrees F with a frost-free period of 150 to 200 days.

In a typical profile of the Cedarpines series, 0 to 5 inches is cobbly sandy loam, 5 to 20 inches is cobbly sandy loam, 20 to 24 inches is extremely cobbly sand, and 24 to 39 inches is bedrock. The depth to the restrictive feature is 24 inches, and the depth to water table is more than 80 inches. This soil drainage class is well drained with no flooding and no ponding as identified in the soil survey. The available water capacity is low to moderately low (0.00 to 0.06 in/hr).

In a typical profile of the Stargazer series, 0 to 3 inches is moderately decomposed plant material, 3 to 16 inches is sandy loam, 16 to 28 inches is clay loam, 28 to 51 inches is loam, and 51 to 61 inches is bedrock. The depth to the restrictive feature is 39 to 69 inches, and the depth to water table is more than 80 inches. This soil drainage class is well drained with no flooding and no ponding as identified in the soil survey. The available water capacity is very low to moderately low (0.00 to 0.06 in/hr).

The map unit composition consists of minor components of Heapspeak (5%), Canyonspring (5%), and Runningspring (5%).

Grunney-Shayroad complex, 4 to 9 percent slopes (129)

These soil series occur at an elevation of 4,380 to 7,040 feet. Mean annual precipitation is 26 to 41 inches, with mean annual air temperature of 50 to 55 degrees F with a frost-free period of 1500 to 200 days.

The Grunney soil series consists of poorly drained soils with parent material of mixed alluvium, and these soils are found on floodplains. In a typical profile, 0 to 5 inches is muck, 5 to 15 inches is mucky loam, and 15 to 59 inches is stratified loamy sand to sandy loam to silt loam. The depth to the restrictive feature is more than 80 inches. This soil drainage class is poorly drained with occasional flooding and no ponding as identified in the soil survey. The available water capacity is moderately high to high (0.60 to 2.00 in/hr).

The Shayroad soil series consists of well drained soils with parent material of alluvium derived from granitoid, and these soils are found on alluvial fans. In a typical profile, 0 to 4 inches is sandy loam, 4 to 35 inches is sandy loam, 35 to 39 inches is sandy loam, and 39 to 59 is sandy loam. The depth to the restrictive feature is more than 80 inches. This soil drainage class is well drained with no flooding and no ponding as identified in the soil survey. The available water capacity is moderately high to high (0.60 to 2.00 in/hr).

The map unit composition consists of minor components of Aquents (5%).

Urban land (135)

This soil series is found on alluvial fans with an elevation of 4,400 to 6,870 feet. Mean annual precipitation is 21 to 42 inches, with mean annual air temperature of 48 to 55 degrees F with a frost-free period of 110 to 200 days. The map unit composition consists of minor components of Xerothents (5%).

Water areas (W)

This series consists of areas with 95 percent cover of water.

Hydric Soils List of California

The Hydric Soils List of California (USDA 2020) was reviewed to verify whether on-site soils are considered to be hydric. It should be noted that lists of hydric soils along with soil survey maps provide off-site ancillary tools to assist in wetland determinations, but they are not a substitute for field investigations. According to the soils list, Grunney-Shayroad Complex, 4 to 9 percent slopes (129) is listed as hydric (Appendix A, *Documentation*).

4.1.6 National Wetlands Inventory

The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory maps were reviewed. According to the National Wetland Inventory, three aquatic features occur within the project site boundary:

- Lake Gregory is listed as a lacustrine system, limnetic subsystem, unconsolidated bottom, permanently flooded (L1UBH);
- an unnamed freshwater pond is listed as a palustrine system, unconsolidated shore (PUS); and
- Houston Creek is listed as a riverine system, intermittent subsystem, streambed, seasonally flooded (R4SBC).

The National Wetland Inventory map is in Appendix A, *Documentation*.

4.1.7 Flood Zone

The Federal Emergency Management Agency's National Flood Insurance Program was reviewed for available flood data within the project site. According to Flood Insurance Rate Map No. 06071C7935H, the project site is located within areas mapped as ZONE A (areas of 1% annual chance of flooding and 26% chance of flooding over 30 years) and Zone X (areas of 0.2% annual chance of flood hazard or areas of 1% annual chance of flood with average depth less than 1 foot or with drainage areas of less than 1 square mile). The Flood Insurance Rate Map is in Appendix A, *Documentation*.

4.1.8 National Hydrography Dataset

The National Hydrography Dataset was reviewed for available hydrography data within the project site using the USGS's National Map Advanced Viewer. According to the National Hydrography Dataset, one named lake, Lake Gregory, was noted within the project site; one named intermittent stream, Houston Creek, was noted through the eastern portion of the project site, generally flowing from south to north; and one unnamed pond was noted on the western edge of the project site. The National Hydrography Dataset map is in Appendix A, *Documentation*.

4.2 FIELD DELINEATION

Michael Baker biologists and regulatory specialists John Parent and Stephen Anderson visited the project site from approximately 8:00 a.m. to 1:30 p.m. on October 12, 2023, to document the extent of jurisdictional areas within the boundaries of the project site. No significant rain events had occurred in the 10 days prior to the site visit. Michael Baker encountered no substantial limitations to access during the site visit. Refer to Appendix B, *Site Photographs*, for representative photographs taken throughout the project site. Table 1 summarizes each aquatic resource investigated during the field delineation. Figure 4 and Figures 4A-4R, *USACE/RWQCB Jurisdictional Map*, and Figure 5 and Figures 5A-5R, *CDFW Jurisdictional Map*, show the limits of agency jurisdiction within the project site.

4.2.1 Lake Gregory

Lake Gregory is an artificial lake that receives water through runoff and snowmelt from the east and west forks of Houston Creek and outlets through a spillway at the northern part of the lake. According to the Draft Operations and Maintenance Plan (JS&TM 2023), the spillway elevation is 4,523.6 feet. The water level can be increased in elevation to 4,526.6 feet with the installation of flashboards across the secondary spillway to store additional runoff in the lake during the spring and summer months. The flashboards are typically removed on September 10 of each year. The normal water surface in the lake recedes to approximately 4,518.6 feet during the dry season due to evaporation, evapotranspiration, and infiltration losses. Previous jurisdictional delineations (Lilburn 2014 and Dudek 2019a) and 404 Permits (NWP 43, SPL-2016-00673-LRS; NWP 33 and NWP 16, SPL-2017-00260-JMV) mapped the OHWM of Lake Gregory at 4,525.5 feet amsl. This report conservatively utilizes 4,526 feet as the OHWM for the lake.

4.2.2 San Moritz Lodge Debris/Sediment Basin and Channel

The feature originates south of San Moritz Drive, which flows from south to north under San Moritz Drive through a large concrete culvert (Inlet 7), then continues north, terminating into Lake Gregory. The feature ranges in width from 10 to 70 feet along its length, has a defined bed and bank (OHWM), distinct change in vegetation from the surrounding habitat, and is tributary to Lake Gregory, which is ultimately tributary to the Mojave River, a TNW. The channel terminates at a sandbar within Lake Gregory that undergoes consistent scouring, erosion, and sediment build up resulting from the water flows of the lake. The 2019 delineation (Dudek 2019a) determined that although hydrophytic vegetation was present, given the lack of hydrology and hydric soils, this sandbar is a non-wetland WoUS and CDFW non-vegetated streambed.

4.2.3 Inlet Locations 1-34

A total of 34 inlet locations were visited around the lake during the field survey. These inlet locations vary in the number of drainage features (i.e., pipes) at each location, some only include one feature and others include multiple features. According to engineering designs provided by JS&TM, there are a total of 44 drainage features at the 34 locations. During the field survey, inlet features were observed at 23 of the 34 locations (1, 4-9a, 10-16, 21-25, 28-30, 33). These inlets are of varying width (12-60 inches) and design [corrugated metal pipes (CMP), corrugate plastic pipes (CPP), PVC, HDPE, solid metal, and concrete] and convey surface flows from stormwater and urban runoff into the lake at various locations throughout the project site, with some inlets appearing to terminate within the lake below the OHWM. The remaining 11

Inlet locations (2-3, 9b, 17-20, 26-27, 31-32) did not have visible drainage features and are assumed to be underground and directly connected to the lake.

Inlets 23-25 and 28-30 (Figures 4D-4G and 5D-5G), are located within the swim beach portion of the project site and are considered jurisdictional. The inlets are in close proximity to the OHWM of the lake, and flows travel overland from 2 to 10 feet before flows terminate at the lake. The channels at these features are shallow and range in width from 1 to 3 feet. The substrate consists of medium grained sand, and there is an absence of vegetation, except for few ornamental trees along the fringes of the beach area. Inlet 33 conveys flows from Library Basin directly into Lake Gregory and jurisdiction is included in Lake Gregory.

The inlets around the remaining portions of the lake (Inlets 1, 4-6, 8-9a, 10-14, 16, 21) are generally set away from the OHWM of the lake, and flows travel overland from 1 to 343 feet before flows terminate at the lake. The channels at these features range from shallow to heavily incised and range in width from 1 to 6 feet. OHWM was observed, as well as flow patterns, wrack, and water marks. Upland vegetation dominated by conifers, consisting primarily of pines (*Pinus* sp.), oaks (*Quercu*s sp.), and white alder (*Alnus rhombifolia*) was present throughout. Inlet 5 (Figures 4K and 5K) outlets with flows travelling overland for 48 feet where the channel widens and becomes undefined with sheetflow to the OHWM. Inlet 8 (Figures 4O and 5O) outlets into a shallow rectangular concrete ditch that conveys flows overland for approximately 320 feet before terminating, where flows travel overland to the OHWM. Inlets 15 and 22 were observed but did not support jurisdictional indicators and are considered non-jurisdictional. Inlet 7 is associated with San Moritz Channel and is included above in Section 4.2.2. Inlet 11 is discussed in more detail below due to the presence of wetland conditions.

INLET 11

Inlet 11 is located along the eastern shore of Lake Gregory, west of San Moritz Way (Figures 4Q and 5Q). Surface flows are channelized and travel overland for approximately 138 feet before terminating at the OHWM of the lake. Vegetation within the uplands was consistent with the project site (i.e., disturbed mixed conifer forest); however, hydrophytic vegetation in the form of a red willow (*Salix laevigata*) thicket was observed within a low-lying area around the channelized flows from Inlet 11.

To assess for the presence of hydric soils and determine the presence/absence of wetlands, two soil pits (SP1 and SP2, Figures 4Q and 5Q) were excavated where wetland hydrology or hydrophytic vegetation was observed. SP1 was excavated within the low-lying area in proximity to Inlet 11. SP1 was dug to the depth of the water table, 12 inches, and there were three observed horizons. At 0 to 1 inch, a texture of loamy sand with a matrix color of 10YR 3/1 when moist with no redoximorphic features was observed. At 1 to 8 inches, a texture of coarse sand with a matrix color of 10YR 4/3 with no redoximorphic features was observed. At 8 to 12 inches, a texture of loamy sand with a matrix color of 10YR 2/2 with no redoximorphic features was observed. The odor of hydrogen sulfide (A4), a hydric soil indicator, was detected during excavation of SP1. Wetland hydrology indicators in the vicinity of SP1 included water marks (B1), sediment deposits (B2), drift deposits (B3), and water-stained leaves (B9).

SP2 was excavated within the uplands and outside of the low-lying area a short distance away. SP2 was dug to a depth of 22 inches with two observed horizons. At 0 to 2 inches was an organic debris layer. At 2

to 22 inches, a texture of sand with a matrix color of 10YR 5/4 with no redoximorphic features was observed. The odor of hydrogen sulfide was not detected during excavation of SP2. No hydrology indicators or hydrophytic vegetation were observed.

Wetland Determination Data Forms – Arid West Region are in Appendix C, *Wetland Data Forms*.

4.2.4 Aquatic Feature 1

Aquatic Feature 1 (AF-1) is located along the southern shore of Lake Gregory east of the parking lot (Figures 4I and 5I). Flows originate along the slopes to the north of San Moritz Drive where surface flows converge and become channelized. The channel ranges in width from 1 to 2 feet and is shallow (2-6 inches), conveying flows for approximately 37 feet before terminating at the OHWM of the lake. Vegetation is dominated by disturbed mixed conifer forest.

4.2.5 Library Debris/Sediment Basin

Library Basin is an approximately 0.85-acre debris/sediment basin that occurs west of Lake Gregory (Figures 4F and 5F). According to the 2014 Jurisdictional Delineation for Lake Gregory Sediment Management and Bioretention Program (Lilburn 2014), this feature was mapped as wetland under the jurisdiction of USACE, RWQCB, and CDFW. This flood control basin is routinely maintained to be clear of vegetation. The 2019 delineation update (Dudek 2019a) determined the feature to contain an OHWM characterized by a defined bed and bank, surface water, change in vegetation, and saturation. A series of inlets are located along the western, northeastern, and southeastern banks. Flows continue east under Lake Gregory Drive through three 60-inch concrete culverts (Inlet 033), terminating into Lake Gregory. This feature was observed to contain hydrophytic vegetation consistent with the previous delineation. A soil pit was not excavated at this location; however, hydric soils were assumed based on the presence of standing water combined with hydrophytic vegetation being present.

SECTION 5 SUMMARY OF FINDINGS

This delineation was conducted to document the jurisdictional authority of the USACE, RWQCB, and CDFW within the project site. This report presents Michael Baker's best efforts at determining the extent of jurisdictional features using the most up-to-date regulations, written policy, and guidance from the regulatory agencies. As with any aquatic resource delineation, however, only the regulatory agencies can make a final determination of jurisdictional boundaries.

5.1 U.S. ARMY CORPS OF ENGINEERS

5.1.1 Non-Wetland Waters of the U.S. Determination

Lake Gregory, numerous inlets (Inlets 1, 4-6, 8, 9a, 10-14, 16, 21, 23-25, 28-30), AF-1, and San Moritz Channel/Sediment Basin (including Inlet 7) qualify as USACE non-wetland WoUS. Evidence of an OHWM was noted within the boundaries of the project site in association with these features. Therefore, all these features would be subject to regulation under Section 404 of the CWA, and USACE jurisdiction totals approximately 78.85 acre (2,112 linear feet) of non-wetland WoUS. Table 1, *Aquatic Resource Jurisdictional Limits within the Project Site*, shows a breakdown of the acreages of USACE jurisdiction, and Figure 4, *USACE/RWQCB Jurisdictional Map*, shows locations of jurisdictional features. To more accurately reflect jurisdiction, those inlets that terminate directly at the OHWM of Lake Gregory or within the lake proper (2-3, 9b, 17-20, 26-27, and 31-32), are accounted for within Lake Gregory.

5.1.2 Wetland Waters of the U.S. Determination

Library Basin and a portion of Inlet 11 qualify as wetland WoUS. In addition to evidence of an OHWM associated with these features, indicators of hydrology, hydric soils, and hydrophytic vegetation were present within Library Basin and Inlet 11. Therefore, Library Basin and a portion of Inlet 11 would be subject to regulation under Section 404 of the CWA, and USACE jurisdiction totals approximately 0.53 acre (344 linear feet) of wetland WoUS. Refer to Table 1, *Aquatic Resource Jurisdictional Limits within the Project Site* and Figure 4, *USACE/RWQCB Jurisdictional Map*.

TABLE 1. AQUATIC RESOURCE JURISDICTIONAL LIMITS WITHIN THE PROJECT SITE

Feature Name	Cowardin Class	Aquatic Feature Class	Acreage (Linear Feet)						
			USACE		RWQCB		CDFW		
			Non-Wetland WoUS	Wetland WoUS	Non-Wetland WoS	Wetland WoS	Lake	Streambed	Riparian
Lake Gregory	Lacustrine	Non-Wetland	77.98 (N/A)	0.00 (0)	77.98 (N/A)	0.00 (0)	77.98 (N/A)	0.00 (0)	0.29
Library Basin	Riverine	Wetland	0.00 (0)	0.41 (235)	0.00 (0)	0.41 (235)	0.00 (0)	0.41 (235)	0.00
San Moritz Channel Basins	Lacustrine	Non-Wetland	0.79 (993)	0.00 (0)	0.79 (993)	0.00 (0)	0.00 (0)	1.18 (993)	0.00
Inlet 1	Riverine	Non-Wetland	0.0002 (5)	0.00 (0)	0.0002 (5)	0.00 (0)	0.00 (0)	0.0002 (5)	0.00
Inlet 2	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 3	Not observed, assumed direct connection to Lake		N/A,	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 4	Riverine	Non-Wetland	0.004 (83)	0.00 (0)	0.004 (83)	0.00 (0)	0.00 (0)	0.003 (83)	0.00
Inlet 5	Riverine	Non-Wetland	0.003 (48)	0.00 (0)	0.003 (48)	0.00 (0)	0.00 (0)	0.003 (48)	0.00
Inlet 6	Riverine	Non-Wetland	0.005 (70)	0.00 (0)	0.005 (70)	0.00 (0)	0.00 (0)	0.004 (70)	0.00
Inlet 7	Observed, included with San Moritz Channel		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 8	Riverine	Non-Wetland	0.039 (344)	0.00 (0)	0.039 (344)	0.00 (0)	0.00 (0)	0.039 (344)	0.00
Inlet 9a	Riverine	Non-Wetland	0.002 (47)	0.00 (0)	0.002 (47)	0.00 (0)	0.00 (0)	0.002 (47)	0.00
Inlet 9b	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 10	Riverine	Non-Wetland	0.002 (75)	0.00 (0)	0.002 (75)	0.00 (0)	0.00 (0)	0.002 (75)	0.00
Inlet 11	Riverine	Non-Wetland and Wetland	0.002 (19)	0.12 (109)	0.115 (109)	0.12 (109)	0.00 (0)	0.115 (109)	0.00

TABLE 1, CONTINUED

Feature Name	Cowardin Class	Aquatic Feature Class	Acreage (Linear Feet)						
			USACE		RWQCB		CDFW		
			Non-Wetland WoUS	Wetland WoUS	Non-Wetland WoS	Wetland WoS	Lake	Streambed	Riparian
Inlet 12	Riverine	Non-Wetland	0.005 (103)	0.00 (0)	0.005 (103)	0.00 (0)	0.00 (0)	0.005 (103)	0.00
Inlet 13	Riverine	Non-Wetland	0.006 (125)	0.00 (0)	0.006 (125)	0.00 (0)	0.00 (0)	0.006 (125)	0.00
Inlet 14	Riverine	Non-Wetland	0.002 (44)	0.00 (0)	0.002 (44)	0.00 (0)	0.00 (0)	0.002 (44)	0.00
Inlet 15	Observed, not jurisdictional		0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00
Inlet 16	Riverine	Non-Wetland	0.002 (36)	0.00 (0)	0.002 (36)	0.00 (0)	0.00 (0)	0.002 (36)	0.00
Inlet 17	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 18	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 19	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 20	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 21	Riverine	Non-Wetland	0.005 (29)	0.00 (0)	0.005 (29)	0.00 (0)	0.00 (0)	0.005 (29)	0.00
Inlet 22	Observed, not jurisdictional		0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00
Inlet 23	Riverine	Non-Wetland	0.0001 (5)	0.00 (0)	0.0001 (5)	0.00 (0)	0.00 (0)	0.0001 (5)	0.00
Inlet 24	Riverine	Non-Wetland	0.0006 (9)	0.00 (0)	0.0006 (9)	0.00 (0)	0.00 (0)	0.0006 (9)	0.00
Spillway 25	Riverine	Non-Wetland	0.0008 (18)	0.00 (0)	0.0008 (18)	0.00 (0)	0.00 (0)	0.0008 (18)	0.00
Inlet 26	Not observed, underground, outlets to #25		N/A	N/A	N/A	N/A	N/A	N/A	N/A

TABLE 1, CONTINUED

Feature Name	Cowardin Class	Aquatic Feature Class	Acreage (Linear Feet)						
			USACE		RWQCB		CDFW		
			Non-Wetland WoUS	Wetland WoUS	Non-Wetland WoS	Wetland WoS	Lake	Streambed	Riparian
Inlet 27	Not observed, underground, outlets to #25		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 28	Riverine	Non-Wetland	0.0004 (10)	0.00 (0)	0.0004 (10)	0.00 (0)	0.00 (0)	0.0004 (10)	0.00
Inlet 29	Riverine	Non-Wetland	0.0004 (8)	0.00 (0)	0.0004 (8)	0.00 (0)	0.00 (0)	0.0004 (8)	0.00
Inlet 30	Riverine	Non-Wetland	0.00009 (4)	0.00 (0)	0.00009 (4)	0.00 (0)	0.00 (0)	0.00009 (4)	0.00
Inlet 31	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 32	Not observed, assumed direct connection to Lake		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Inlet 33	Observed, outlets directly into Lake, not jurisdictional		0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00
AF- 1	Riverine	Non-Wetland	0.002 (37)	0.00 (0)	0.002 (37)	0.00 (0)	0.00 (0)	0.002 (37)	0.00
		TOTAL	**78.85 (2,112)**	**0.53 (344)**	**78.85 (2,112)**	**0.53 (344)**	**77.98**	**1.78 (2,437)**	**0.29**

5.2 REGIONAL WATER QUALITY CONTROL BOARD

5.2.1 Non-Wetland Waters of the State Determination

Evidence of an OHWM was noted within the boundaries of the project site in association with Lake Gregory, numerous inlets (Inlets 1, 4-6, 8, 9a, 10-14, 16, 21, 23-25, 28-30), AF-1, and San Moritz Channel/Sediment Basin (including Inlet 7). No isolated non-federal aquatic features were observed within the boundaries of the project site. Therefore, the jurisdiction of the RWQCB reflects that of the USACE and totals approximately 78.85 acres (2,112 linear feet) of non-wetland Waters of the State.

5.2.2 Wetland Waters of the State Determination

An area must exhibit all three wetland parameters described in the 2008 *Regional Supplement* to be considered a USACE jurisdictional wetland. In addition, the state wetland definition and delineation procedures are largely consistent with the three-parameter approach involving indicators of hydrophytic vegetation, hydric soil, and wetland hydrology implemented by the USACE. One exception, however, is that an area can lack vegetation and still satisfy the parameter for hydrophytic vegetation, thus qualifying the area as wetland Waters of the State if the hydric soil and wetland hydrology parameters are also fulfilled. Based on the results of the field delineation, it was determined that Library Basin and Inlet 11 contained RWQCB wetlands that coincide with the USACE jurisdictional wetland WoUS as there was an OHWM associated with these features as well as indicators of hydrology, hydric soils, and hydrophytic vegetation. RWQCB jurisdictional wetlands total approximately 0.53 acre (344 linear feet) of wetland Waters of the State. Refer to Table 1, *Aquatic Resource Jurisdictional Limits within the Project Site* and Figure 4, *USACE/RWQCB Jurisdictional Map*.

5.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Lake Gregory, Library Basin, San Moritz Channel/Basin (including Inlet 7), numerous inlets (Inlets 1, 4-6, 8, 9a, 10-14, 16, 21, 23-25, 28-30), and AF-1 are considered to be CDFW jurisdictional lake, streambed, and associated riparian habitats. It was determined that 77.98 acres of CDFW jurisdictional lake, 1.78 acres of CDFW jurisdictional streambed (1.67 acre of CDFW non-vegetated streambed and 0.11 acre of vegetated streambed) as well as 0.29 acre of associated riparian habitat are located within the project site (Table 1, *Aquatic Resource Jurisdictional Limits within the Project Site* and Figure 5, *CDFW Jurisdictional Map*).

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Soil Pit
- Inlet Location

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

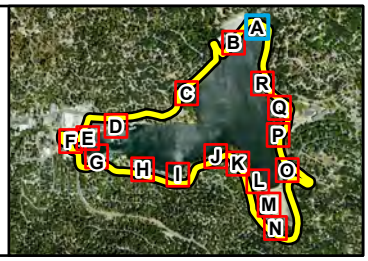
USACE/RWQCB Jurisdictional Map

Figure 4

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

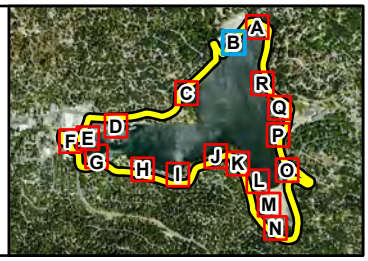
USACE/RWQCB Jurisdictional Map

Figure 4A

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

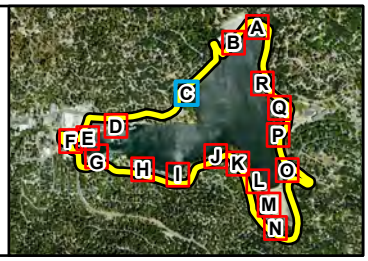
USACE/RWQCB Jurisdictional Map

Figure 4B

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

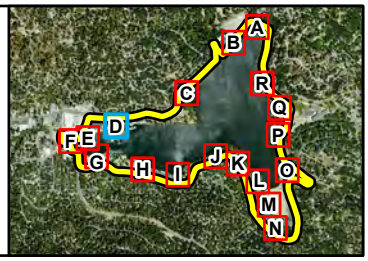
USACE/RWQCB Jurisdictional Map

Figure 4C

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

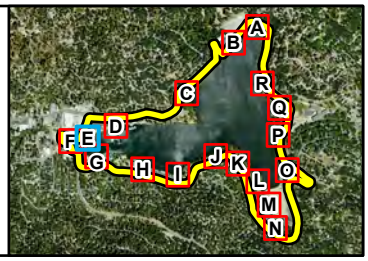
USACE/RWQCB Jurisdictional Map

Figure 4D

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

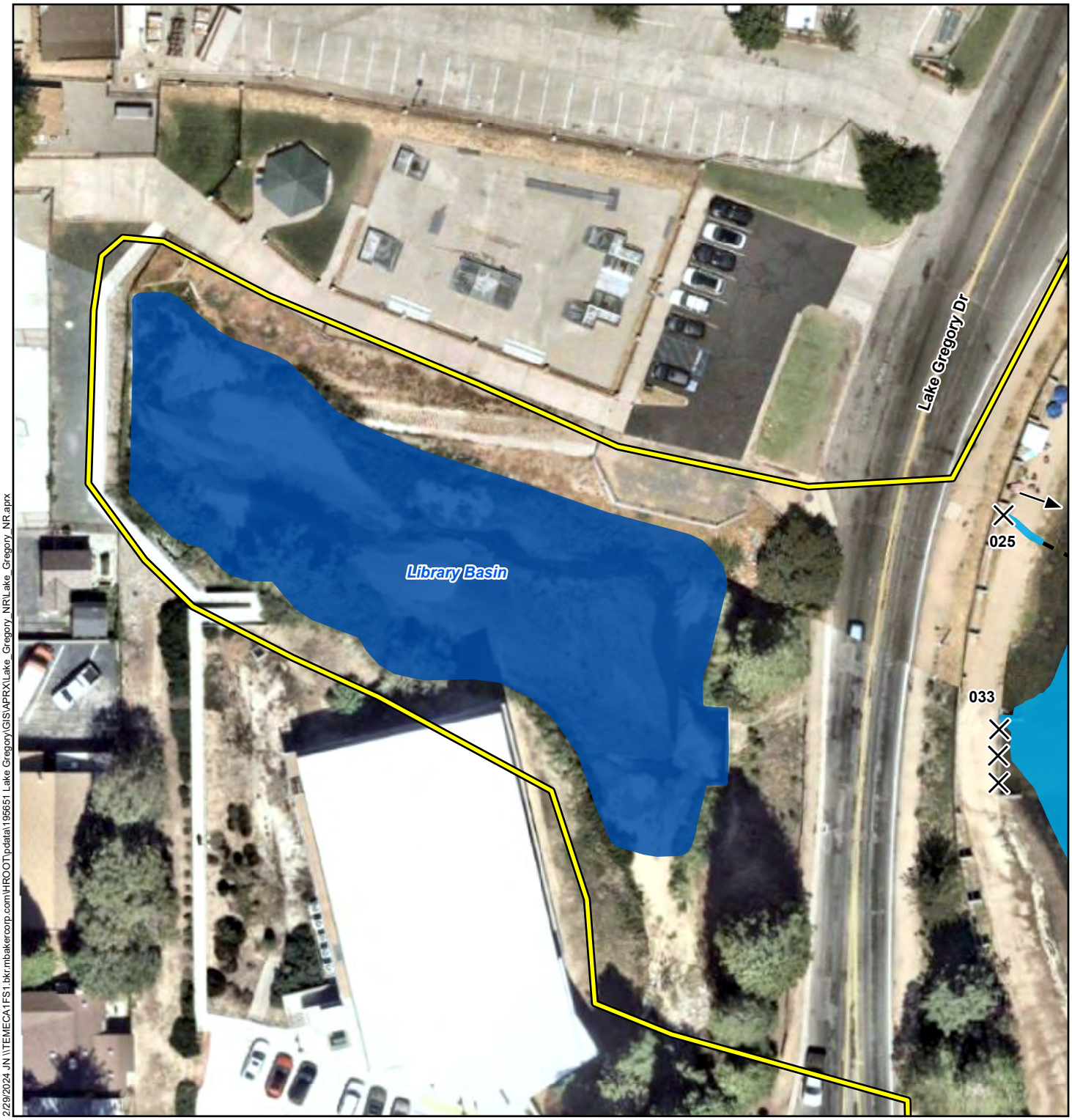
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

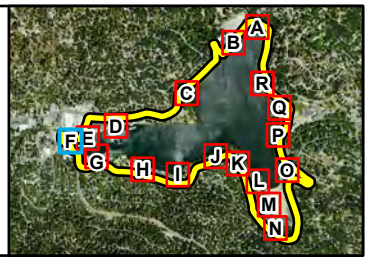
Figure 4E



2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

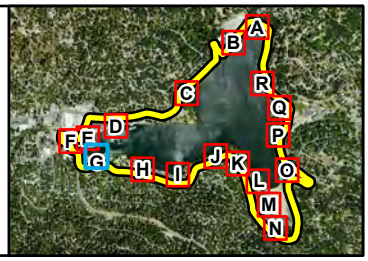
USACE/RWQCB Jurisdictional Map

Figure 4F

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4G

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit

Michael Baker INTERNATIONAL

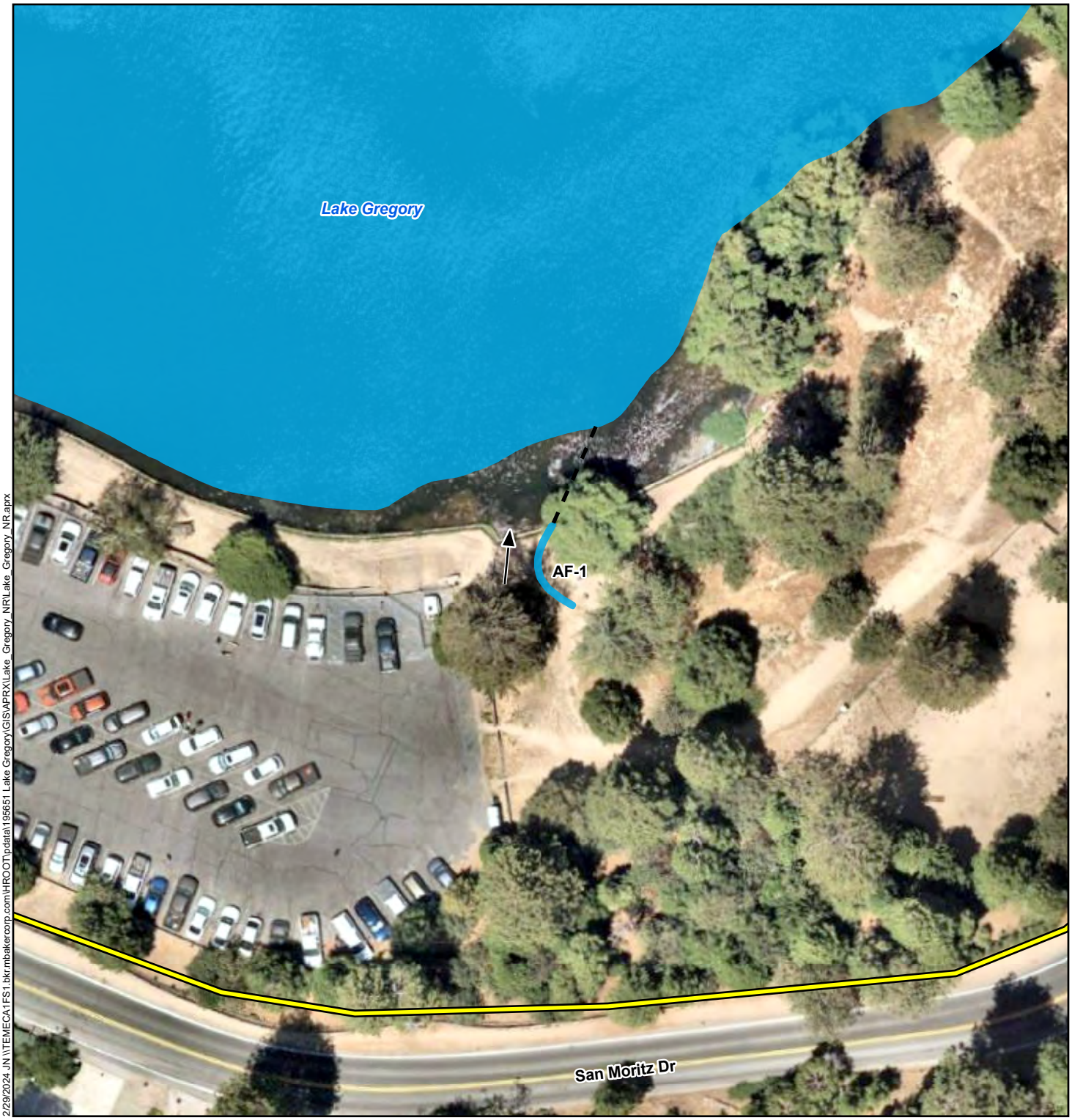
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4H



2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

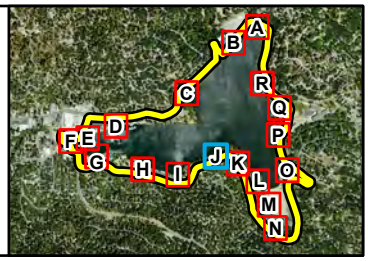
USACE/RWQCB Jurisdictional Map

Figure 4I

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4J

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4K

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

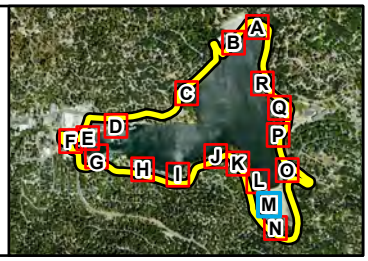
USACE/RWQCB Jurisdictional Map

Figure 4L

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

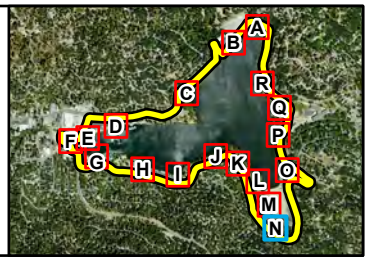
USACE/RWQCB Jurisdictional Map

Figure 4M

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

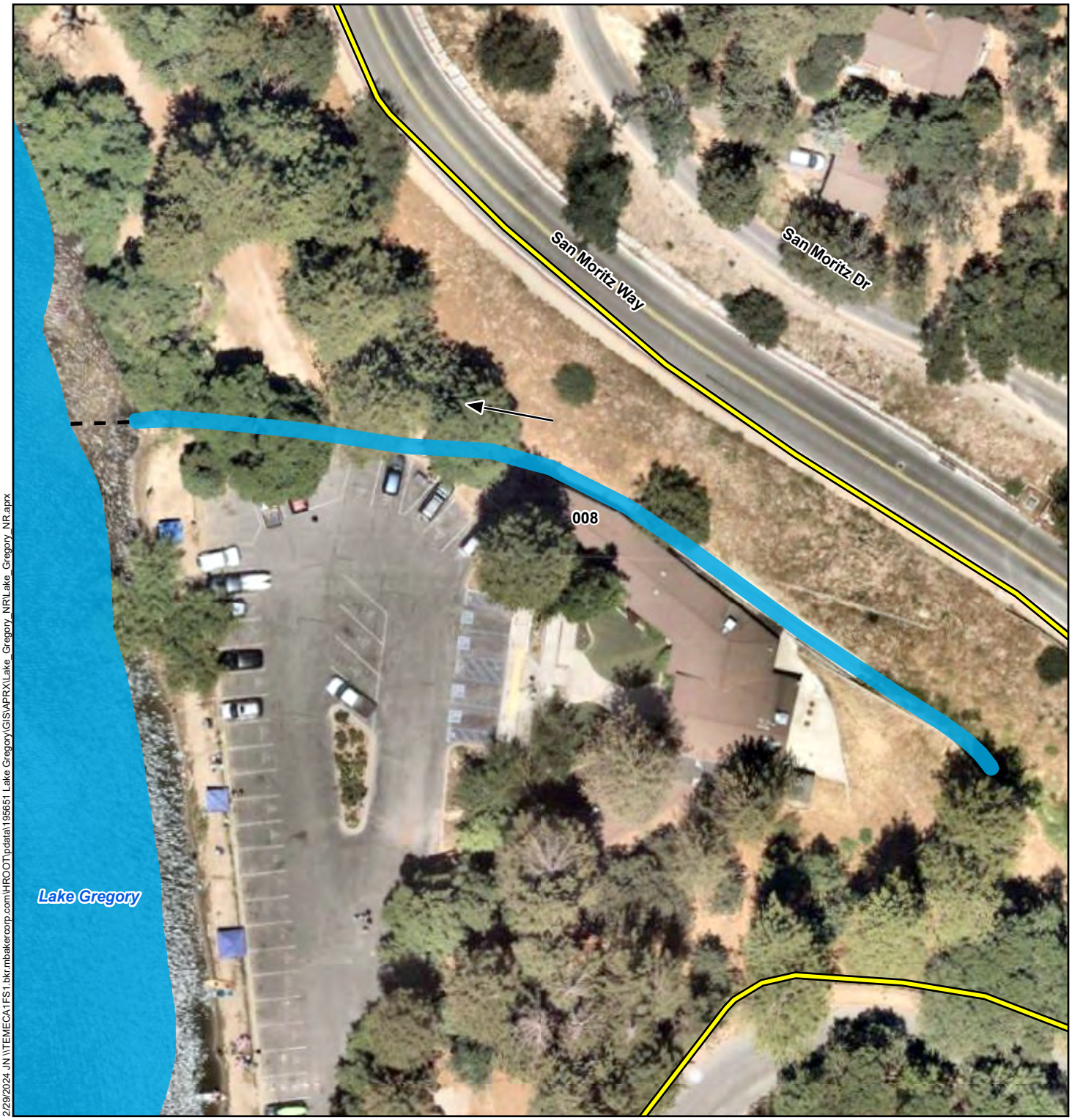
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4N



2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit

Michael Baker INTERNATIONAL

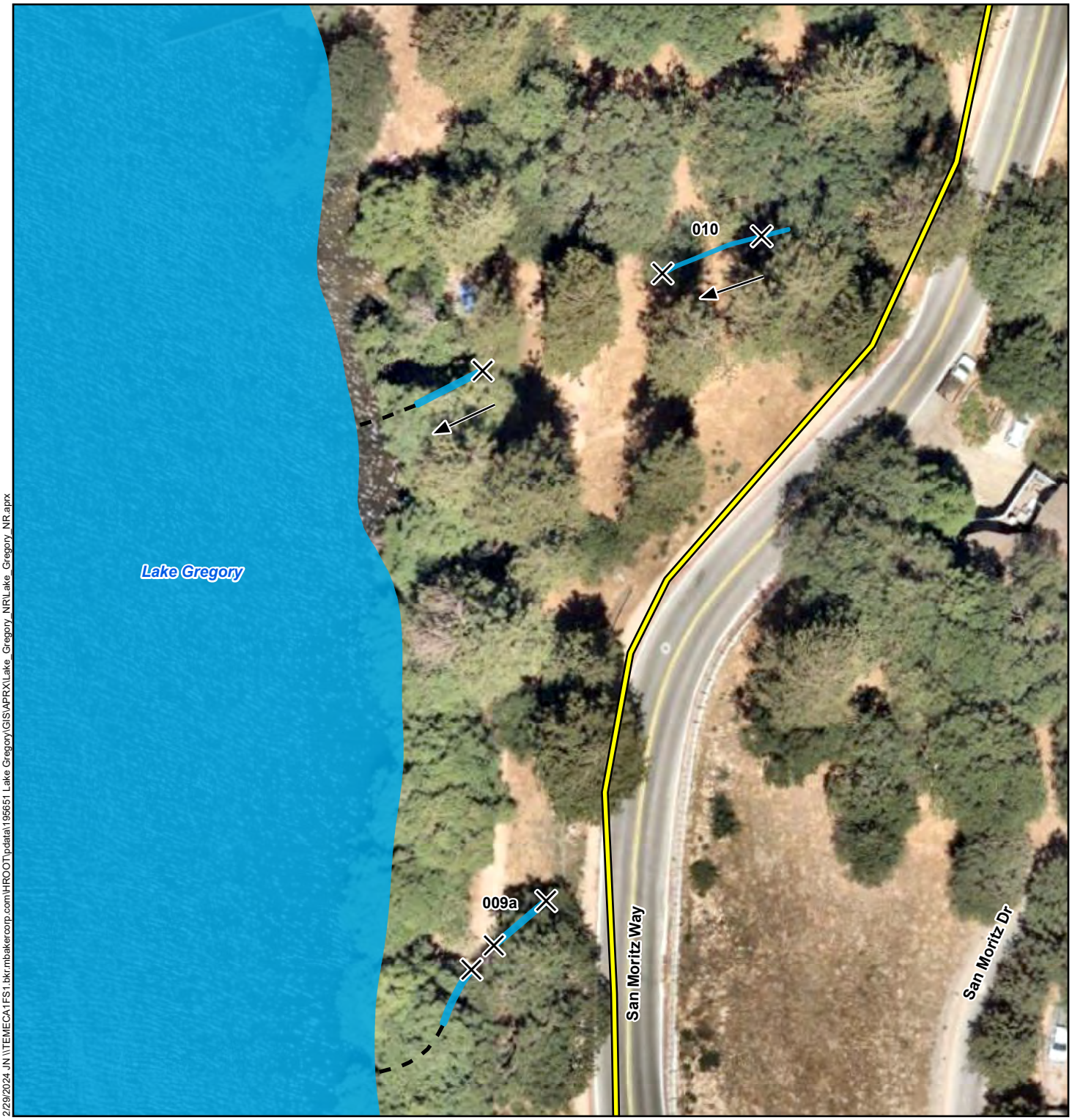
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4O



2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

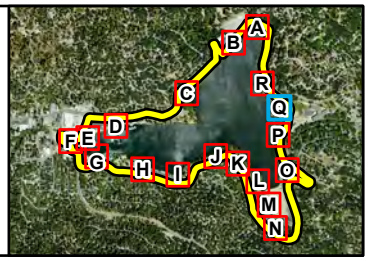
USACE/RWQCB Jurisdictional Map

Figure 4P

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

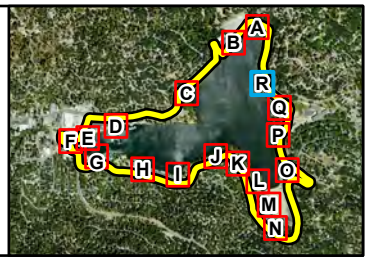
USACE/RWQCB Jurisdictional Map

Figure 4Q

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Wetland Waters of the U.S. (0.53 acre)
- Non-Wetland Waters of the U.S. (78.85 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet
- Soil Pit



Michael Baker INTERNATIONAL

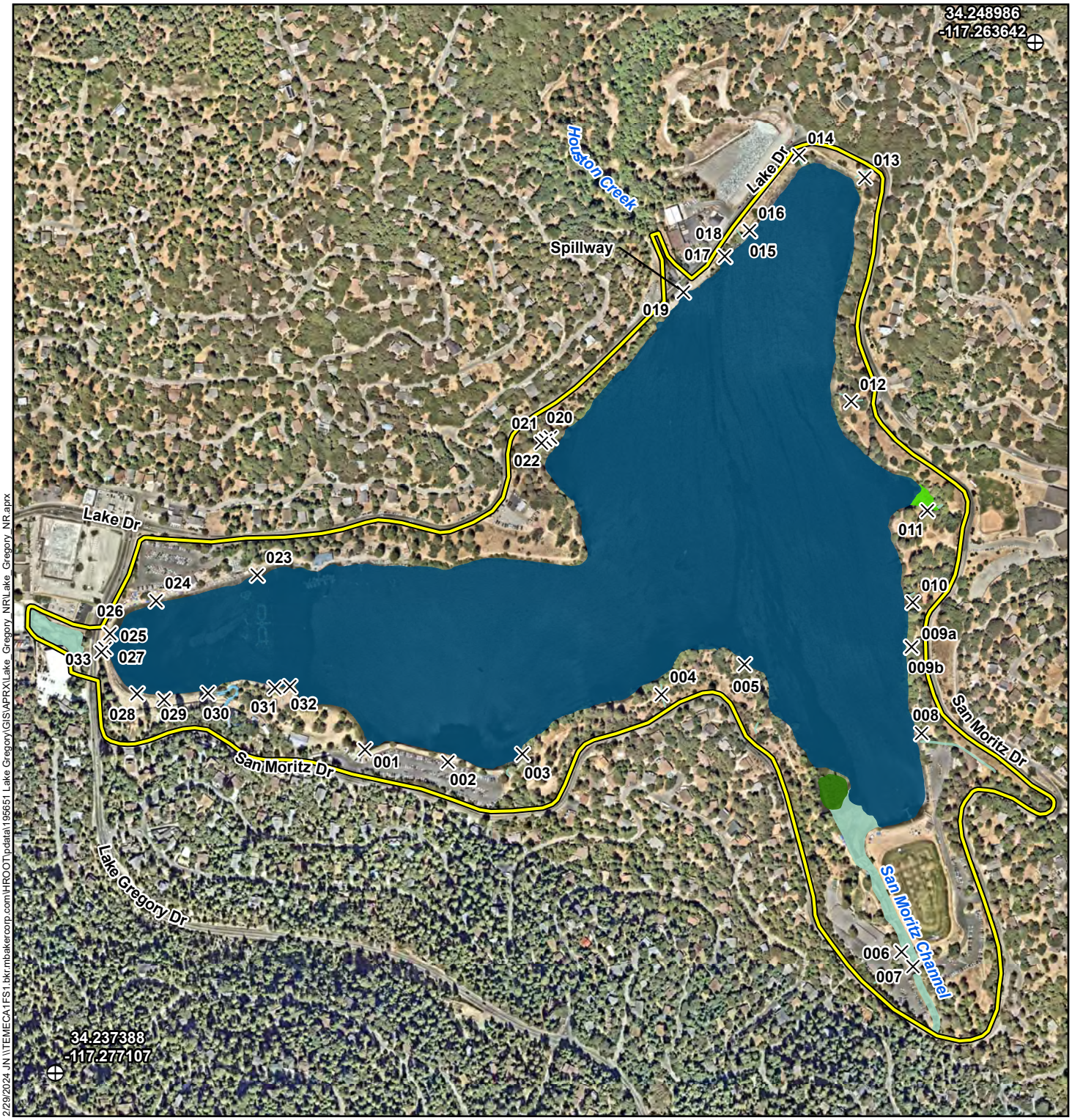
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

USACE/RWQCB Jurisdictional Map

Figure 4R



Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Inlet Location

Michael Baker INTERNATIONAL

0 290 580 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

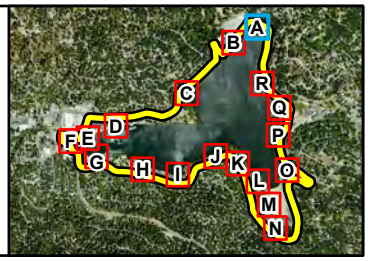
CDFW Jurisdictional Map

Figure 5

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

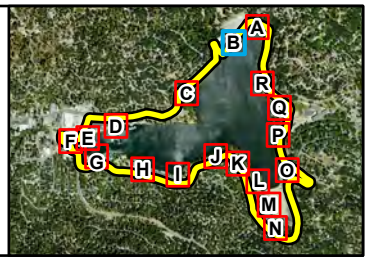
CDFW Jurisdictional Map

Figure 5A

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

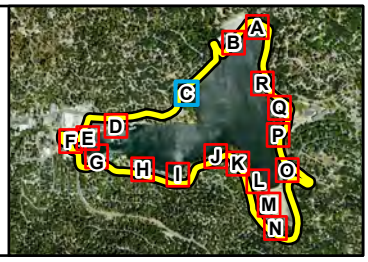
CDFW Jurisdictional Map

Figure 5B

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

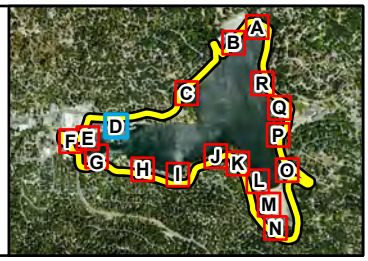
CDFW Jurisdictional Map

Figure 5C

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

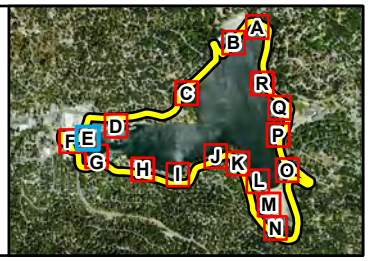
CDFW Jurisdictional Map

Figure 5D

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

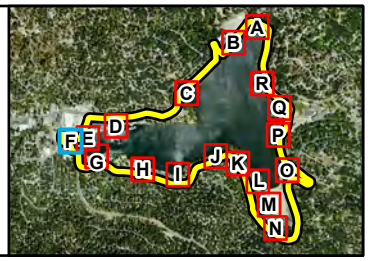
CDFW Jurisdictional Map

Figure 5E

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

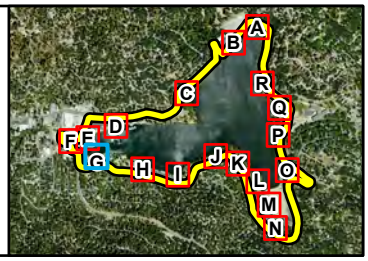
CDFW Jurisdictional Map

Figure 5F

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

Figure 5G

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet

Michael Baker INTERNATIONAL

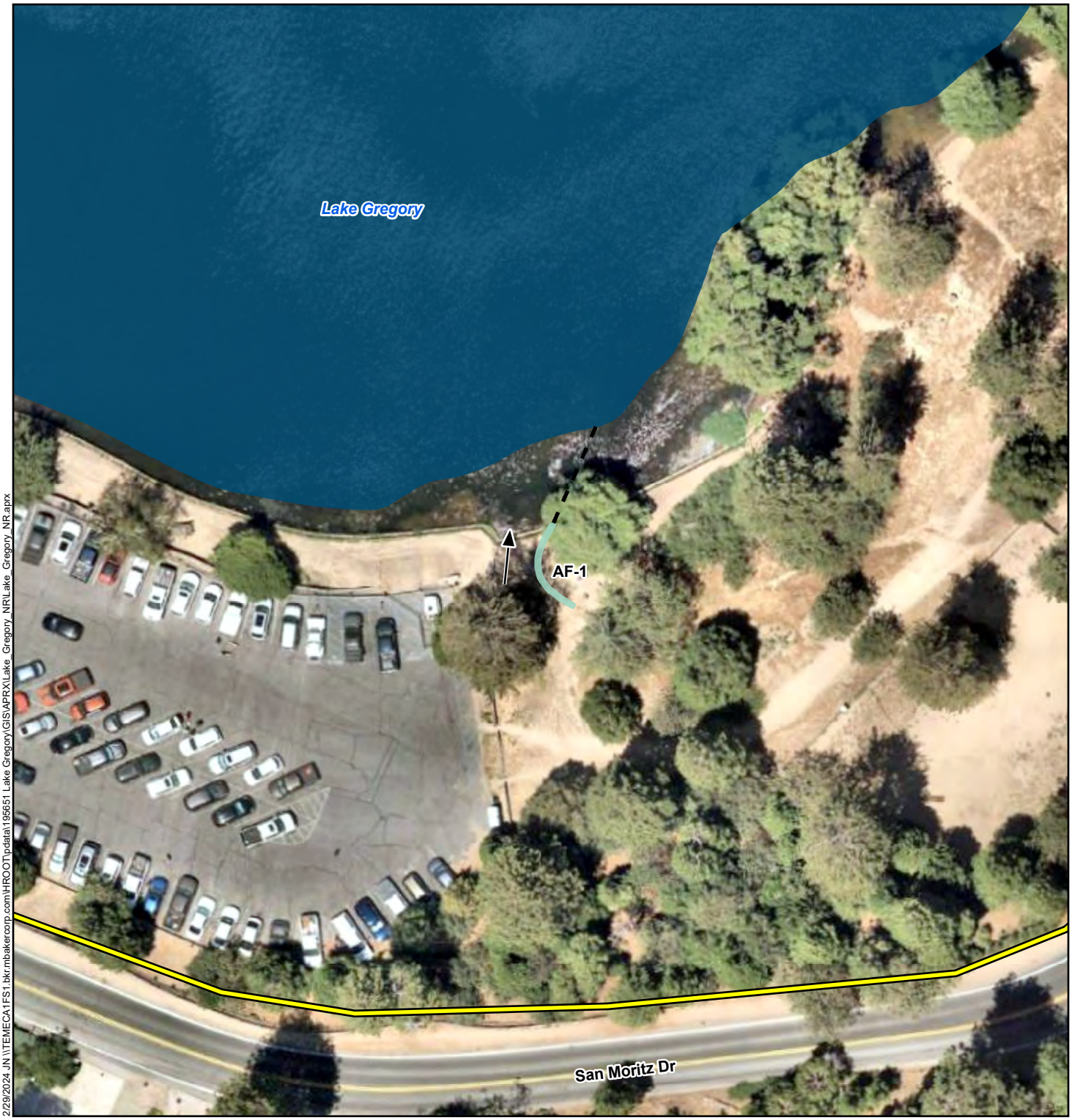
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

Figure 5H



2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

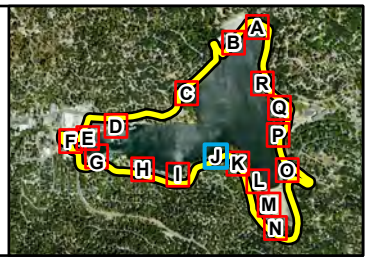
CDFW Jurisdictional Map

Figure 5I

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

Figure 5J

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

Figure 5K

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet

Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

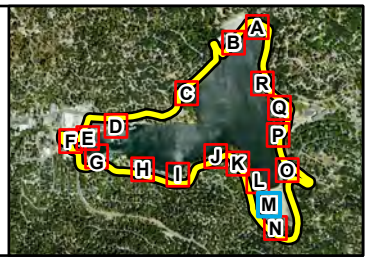
CDFW Jurisdictional Map

Figure 5L

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

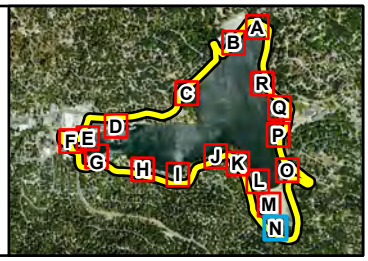
CDFW Jurisdictional Map

Figure 5M

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

Figure 5N

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet

Michael Baker INTERNATIONAL

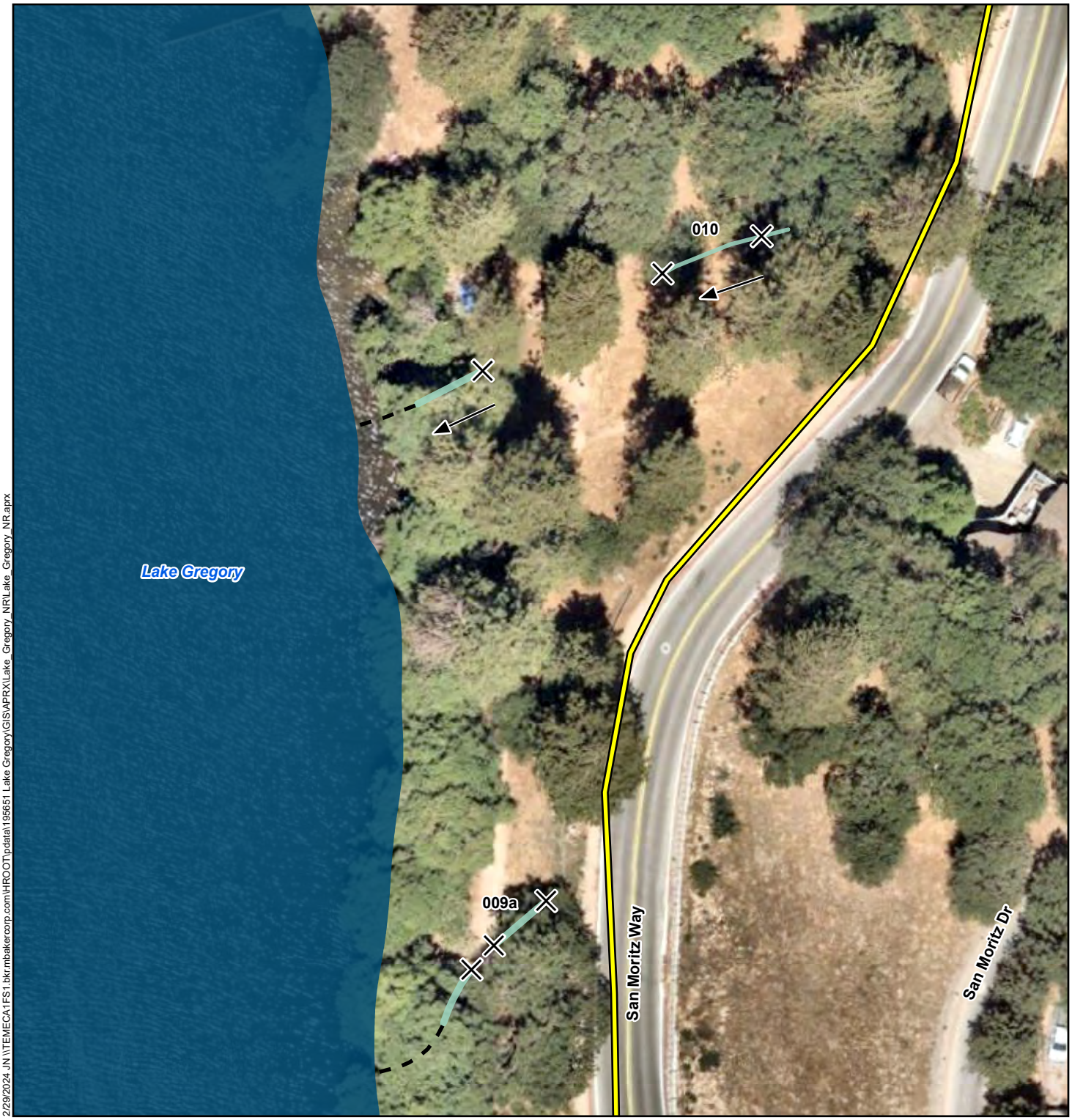
0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

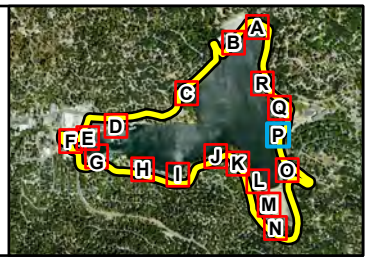
Figure 5O



2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

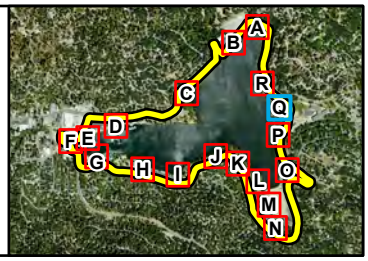
CDFW Jurisdictional Map

Figure 5P

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

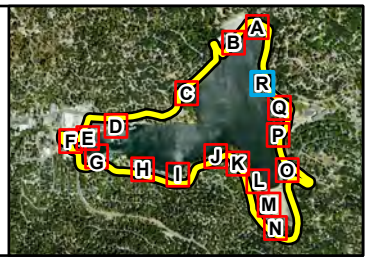
CDFW Jurisdictional Map

Figure 5Q

2/29/2024 JN \\TEMECA1FS1.bkr.mbakercorp.com\HROOT\pdata\195651 Lake Gregory\GIS\APRX\Lake_Gregory_NR\Lake_Gregory_NR.aprx

Legend

- Project Site
- Reference Point
- Associated Riparian Vegetation (0.29 acre)
- Vegetated Streambed (0.11 acre)
- Non-Vegetated Streambed (1.67 acres)
- CDFW Lake (77.98 acres)
- Discontinuous Overland Sheet Flow
- Flow Direction
- Inlet



Michael Baker INTERNATIONAL

0 25 50 Feet

Source: Nearmap (09/2023)

LAKE GREGORY SITEWIDE SEDIMENT MANAGEMENT PROJECT
AQUATIC RESOURCES DELINEATION REPORT

CDFW Jurisdictional Map

Figure 5R

SECTION 6 REGULATORY APPROVAL PROCESS

This report has been prepared to delineate the USACE, RWQCB, and CDFW jurisdictional authority within the project site. Below is a summary of the various permits/authorizations that would be required prior to temporarily or permanently impacting on-site jurisdictional features.

6.1 U.S. ARMY CORPS OF ENGINEERS

The USACE regulates discharges of dredged or fill materials into WoUS and wetlands pursuant to Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. Based on a review of the conceptual site plan, approximately 0.53 acre (344 linear feet) of wetland WoUS and 78.85 acres (2,112 linear feet) of non-wetland WoUS USACE jurisdiction occur within the project site. Any impacts within USACE jurisdiction would require the project proponent to obtain a Section 404 permit from the USACE prior to impacts occurring within USACE jurisdictional areas.

6.2 REGIONAL WATER QUALITY CONTROL BOARD

The RWQCB regulates discharges to surface waters under the CWA and the Porter-Cologne Act. Based on a review of the conceptual site plan, approximately 0.53 acre (344 linear feet) of wetland WoUS and 78.85 acres (2,112 linear feet) of non-wetland WoUS of RWQCB jurisdiction occurs within the project site. Any impacts within RWQCB jurisdiction would require the project proponent to obtain a Section 401 Water Quality Certification from the RWQCB prior to impacts occurring within RWQCB jurisdictional areas.

6.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

The CDFW regulates substantial alterations to streambed under Section 1602 of the CFGC. Based on a review of the conceptual site plan, approximately 77.98 acres of CDFW jurisdictional lake, 1.78 acres (2,437 linear feet) of CDFW jurisdictional streambed, and 0.29 acre of CDFW associated riparian vegetation occur within the project site. Formal notification to CDFW would be required prior to commencement of any construction activities within the CDFW jurisdictional areas. The CDFW also requires compliance with the California Environmental Quality Act (CEQA) prior to issuing the final LSAA. In addition, a notification fee is required, which is calculated based on project costs within CDFW jurisdictional areas.

6.4 RECOMMENDATIONS

Based on the results of this delineation and the anticipated impacts to jurisdictional areas, permit applications for a Section 404, Section 401, and Lake and Streambed Alteration Agreement should be prepared and submitted to the USACE, RWQCB, and CDFW, respectively. As part of the regulatory permitting process, this delineation will be forwarded to each of the regulatory agencies for their concurrence. The concurrence/receipt would be valid up to five years and would solidify findings noted within this report.

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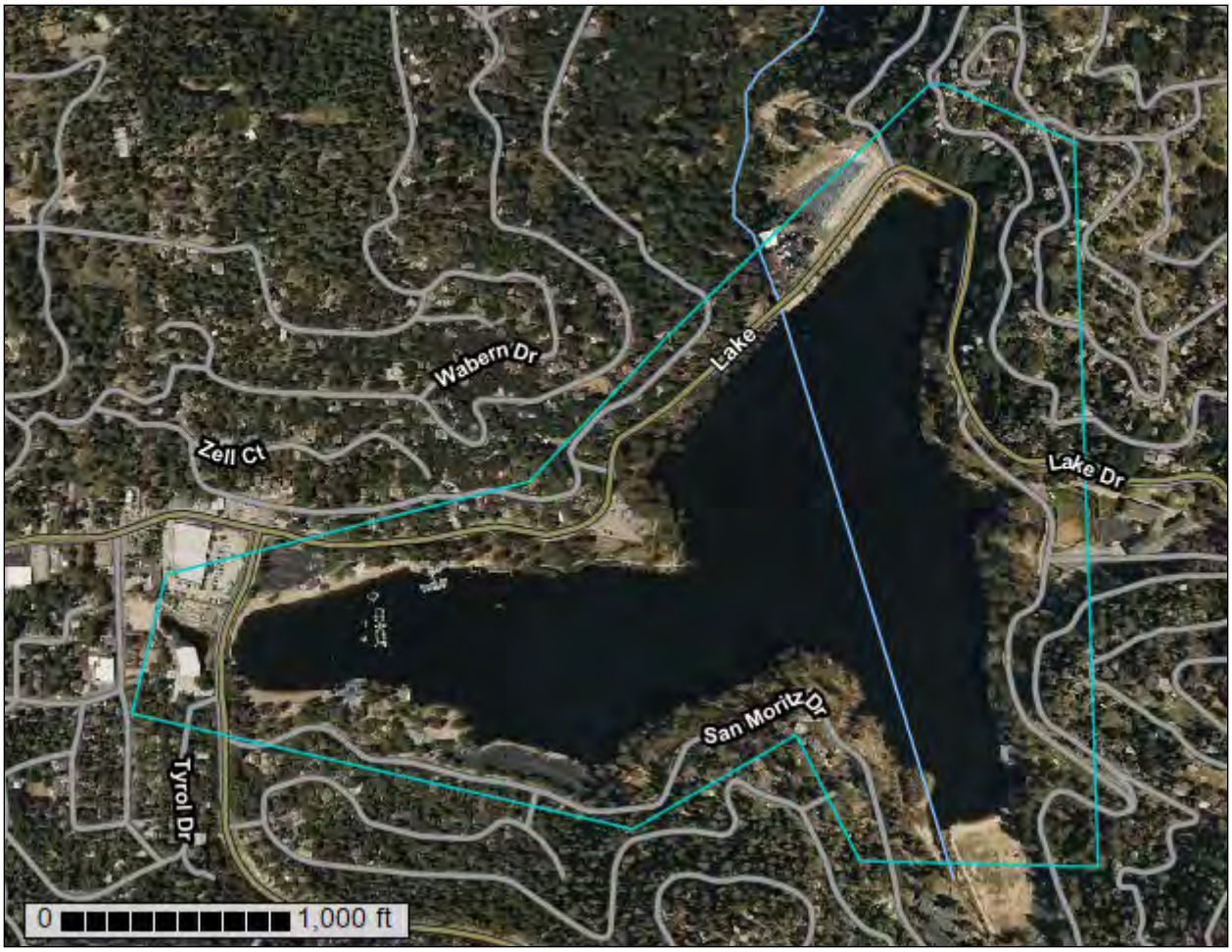
Appendix A: Documentation

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for San Bernardino National Forest Area, California



November 16, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

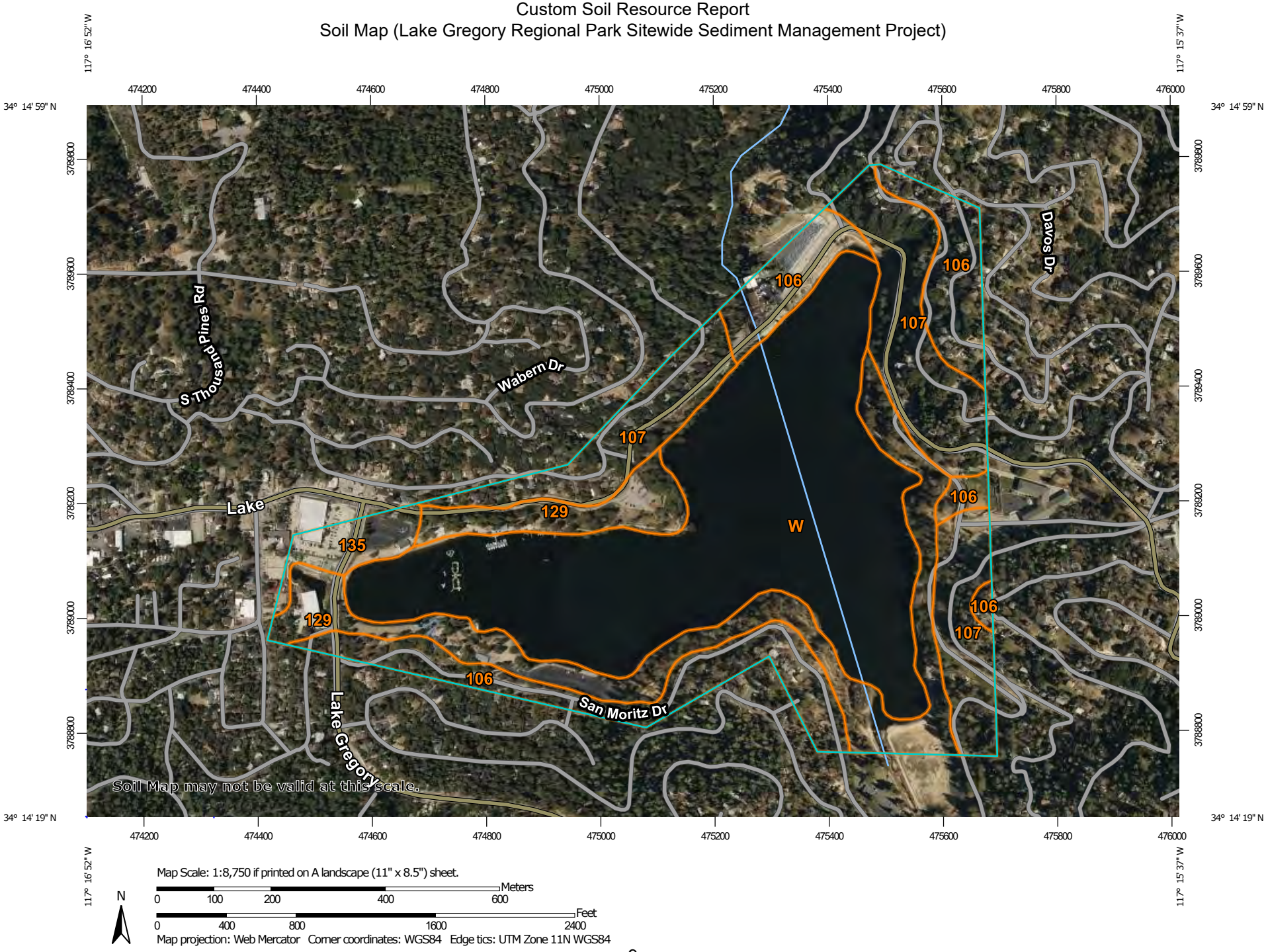
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Soil Map (Lake Gregory Regional Park Sitewide Sediment Management Project)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino National Forest Area, California
Survey Area Data: Version 15, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2022—Jun 12, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Lake Gregory Regional Park Sitewide Sediment Management Project)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
106	Cedarpines-Stargazer-Urban land complex, 15 to 30 percent slopes	30.2	16.7%
107	Cedarpines-Stargazer-Urban land complex, 30 to 50 percent slopes	35.8	19.8%
129	Grunney-Shayroad complex, 4 to 9 percent slopes	32.7	18.1%
135	Urban land	4.6	2.6%
W	Water areas	77.3	42.8%
Totals for Area of Interest		**180.5**	**100.0%**

Map Unit Descriptions (Lake Gregory Regional Park Sitewide Sediment Management Project)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the

scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Bernardino National Forest Area, California

106—Cedarpines-Stargazer-Urban land complex, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2dvlx
Elevation: 4,330 to 6,460 feet
Mean annual precipitation: 26 to 41 inches
Mean annual air temperature: 52 to 55 degrees F
Frost-free period: 150 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Cedarpines and similar soils: 45 percent
Stargazer and similar soils: 25 percent
Urban land: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cedarpines

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from granitoid

Typical profile

A - 0 to 5 inches: cobbly sandy loam
Bw - 5 to 20 inches: cobbly sandy loam
C - 20 to 24 inches: extremely cobbly sand
Cr - 24 to 39 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 24 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: F019XG914CA - Loamy Hills >30"ppt
Hydric soil rating: No

Description of Stargazer

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from granitoid

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
A - 3 to 16 inches: sandy loam
Bt1 - 16 to 28 inches: clay loam
Bt2 - 28 to 51 inches: loam
Cr - 51 to 61 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: 39 to 69 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F019XG914CA - Loamy Hills >30"ppt
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F019XG913CA - Loamy Hills <30"ppt

Minor Components

Heapspeak

Percent of map unit: 5 percent
Landform: Ridges

Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Canyonspring

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Runningsprings

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

107—Cedarpines-Stargazer-Urban land complex, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: 2dvly
Elevation: 4,350 to 6,980 feet
Mean annual precipitation: 26 to 41 inches
Mean annual air temperature: 52 to 55 degrees F
Frost-free period: 150 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Cedarpines and similar soils: 45 percent
Stargazer and similar soils: 25 percent
Urban land: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cedarpines

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from granitoid

Typical profile

A - 0 to 5 inches: cobbly sandy loam
Bw - 5 to 20 inches: cobbly sandy loam
C - 20 to 24 inches: extremely cobbly sand
Cr - 24 to 39 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent
Depth to restrictive feature: 24 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: F019XG914CA - Loamy Hills >30"ppt
Hydric soil rating: No

Description of Stargazer

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Colluvium and/or residuum weathered from granitoid

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
A - 3 to 16 inches: sandy loam
Bt1 - 16 to 28 inches: clay loam
Bt2 - 28 to 51 inches: loam
Cr - 51 to 61 inches: bedrock

Properties and qualities

Slope: 15 to 35 percent
Surface area covered with cobbles, stones or boulders: 1.0 percent
Depth to restrictive feature: 39 to 69 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F019XG914CA - Loamy Hills >30"ppt
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F019XG913CA - Loamy Hills <30"ppt

Minor Components

Heapspeak

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Canyonspring

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Runningsprings

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

129—Grunney-Shayroad complex, 4 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2dvmm
Elevation: 4,380 to 7,040 feet
Mean annual precipitation: 26 to 41 inches
Mean annual air temperature: 50 to 55 degrees F
Frost-free period: 150 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition

Grunney and similar soils: 50 percent
Shayroad and similar soils: 45 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Grunney

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

Oa - 0 to 5 inches: muck
A - 5 to 15 inches: mucky loam
Cg - 15 to 59 inches: stratified loamy sand to sandy loam to silt loam

Properties and qualities

Slope: 4 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 0 to 20 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D

Ecological site: R019XG907CA - Loamy Bottom
Hydric soil rating: Yes

Description of Shayroad

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Alluvium derived from granitoid

Typical profile

A1 - 0 to 4 inches: sandy loam
A2 - 4 to 35 inches: sandy loam
Bw - 35 to 39 inches: sandy loam
C - 39 to 59 inches: sandy loam

Properties and qualities

Slope: 4 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: R019XG911CA - Loamy Fan
Hydric soil rating: No

Minor Components

Aquents

Percent of map unit: 5 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

135—Urban land

Map Unit Setting

National map unit symbol: 2dvmt

Elevation: 4,400 to 6,870 feet
Mean annual precipitation: 21 to 42 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 110 to 200 days
Farmland classification: Not prime farmland

Map Unit Composition
Urban land: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: R019XG911CA - Loamy Fan

Minor Components

Xerorthents
Percent of map unit: 5 percent
Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

W—Water areas

Map Unit Composition
Water: 95 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

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Soil Data Access (SDA) Hydric Soils List

An SDA-populated select list is used to pick a state and SSA which enables creation of a "Hydric Soils Report" based upon those selections. The data is not static; it hits Soil Data Access Live. To reset the table hit F5 on the keyboard. Once a survey is selected and table appears, if a new survey is selected it will append to the table at the bottom. For more information about the table,

California

selected stateId = CA

San Bernardino National Forest Area, California

selected SSA areasymbol = CA777

State_Sym	Area_Symbol	Area_Name	mukey	Mapunit_SYM	Mapunit_Name	Comp_Name_phase	muacres	Comp_RV_Pct	majcompflag	Comp_Acres	Comp_Landform	microfeatu
CA	CA777	San Bernardino National Forest Area, California	1380271	119	Cajon-Wasco, cool complex, 2 to 9 percent slopes*	Riverwash	4	1	No	0.0	channels	null
CA	CA777	San Bernardino National Forest Area, California	2230128	129	Grunney-Shayroad complex, 4 to 9 percent slopes	Grunney	482	50	Yes	241.0	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230128	129	Grunney-Shayroad complex, 4 to 9 percent slopes	Aquents	482	5	No	24.1	drainageways	null
CA	CA777	San Bernardino National Forest Area, California	2230131	132	Aquents-Grunney complex, 0 to 4 percent slopes	Aquents	1424	50	Yes	712.0	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230131	132	Aquents-Grunney complex, 0 to 4 percent slopes	Grunney	1424	40	Yes	569.6	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230141	305	Moonridge-Shayroad-Caribouccreek complex, 0 to 4 percent slopes	Grunney	1890	2	No	37.8	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230142	306	Moonridge-Caribouccreek-Urban land complex, 0 to 4 percent slopes	Grunney	1439	3	No	43.2	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230142	306	Moonridge-Caribouccreek-Urban land complex, 0 to 4 percent slopes	Aquents	1439	2	No	28.8	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230143	307	Doble-Shayroad complex, 4 to 9 percent slopes	Grunney	454	3	No	13.6	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230161	405	Grunney mucky loam, 0 to 4 percent slopes	Grunney, mucky loam	110	85	Yes	93.5	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230161	405	Grunney mucky loam, 0 to 4 percent slopes	Aquents	110	5	No	5.5	drainageways	null
CA	CA777	San Bernardino National Forest Area, California	2230162	407	Doble-Shayroad-Urban land complex, 4 to 9 percent slopes	Grunney	269	3	No	8.1	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	2230166	413	Aquents-Riverwash complex, 0 to 4 percent slopes	Aquents	165	60	Yes	99.0	drainageways	null
CA	CA777	San Bernardino National	1380272	628	Haploxerolls-Riverwash association, 2 to	Riverwash	25	20	Yes	5.0	washes	null

		Forest Area, California			25 percent slopes							
CA	CA777	San Bernardino National Forest Area, California	471609	AeD	Oak Glen family-Riverwash association, 2 to 30 percent slopes	Riverwash	940	15	Yes	141.0	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	471616	CaD	Cagey family-Riverwash association, 2 to 15 percent slopes	Riverwash	2120	15	Yes	318.0	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	471639	EsD	Riverwash-Soboba families association, 2 to 15 percent slopes	Riverwash	4505	50	Yes	2252.5	alluvial flats	null
CA	CA777	San Bernardino National Forest Area, California	848229	MrE	Mottsville cobbly loamy sand, 8 to 25 percent slopes	Riverwash	5	5	No	0.3	channels	null
CA	CA777	San Bernardino National Forest Area, California	848230	MsC	Mottsville sandy loam, 2 to 8 percent slopes	Riverwash	428	5	No	21.4	channels	null
CA	CA777	San Bernardino National Forest Area, California	848231	MsD	Mottsville sandy loam, 8 to 15 percent slopes	Riverwash	137	5	No	6.9	channels	null
CA	CA777	San Bernardino National Forest Area, California	848232	MtE2	Mottsville cobbly sandy loam, 8 to 25 percent slopes, eroded	Riverwash	41	5	No	2.1	channels	null
CA	CA777	San Bernardino National Forest Area, California	471668	Rw	Riverwash	Riverwash	3805	80	Yes	3044.0	flood plains	null
CA	CA777	San Bernardino National Forest Area, California	1380276	SsD	Soboba stony loamy sand, 2 to 15 percent slopes	Riverwash	2	10	No	0.2	channels	null

Report Metadata: Back to top

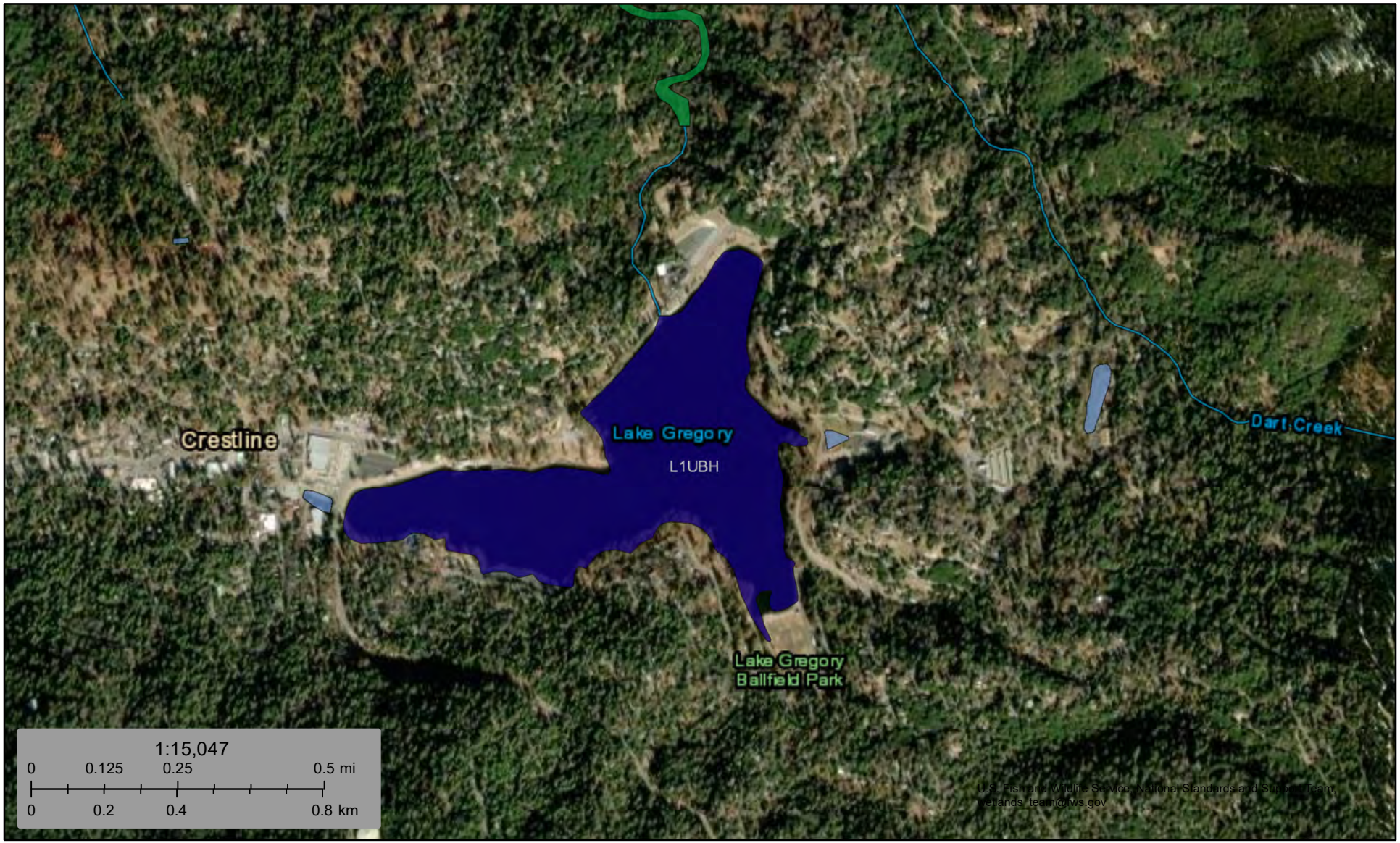
- **Area_Symbol:** A symbol that uniquely identifies a single occurrence of a particular type of area (e.g. Dane Co., Wisconsin is WI025).
- **Area_Name:** The name given to the specified geographic area.
- **mukey:** A non-connotative string of characters used to uniquely identify a record in the Mapunit table.
- **Mapunit_SYM:** The symbol used to uniquely identify the soil mapunit in the soil survey.
- **Mapunit_Name:** Correlated name of the mapunit (recommended name or field name for surveys in progress).
- **Comp_Name_phase:** Component name - Name assigned to a component based on its range of properties. Local Phase - Phase criterion to be used at a local level, in conjunction with "component name" to help identify a soil component.
- **muacres:** The number of acres of a particular mapunit.
- **Comp_RV_Pct:** The percentage of the component of the mapunit.
- **majcompflag:** Indicates whether or not a component is a major component in the mapunit.
- **Comp_Acres:** The number of acres of a particular component in a mapunit. ((muacres*comppct_r)/100)
- **Comp_Landform:** A word or group of words used to name a feature on the earth's surface, expressed in the plural form. Column Physical
- **Hydric_Rating:** A yes/no field that indicates whether or not a map unit component is classified as a "hydric soil". If rated as hydric, the specific criteria met are listed in the Component Hydric Criteria table.
- **Hydric_criteria:** Criterion code for the soil characteristic(s) and/or feature(s) that cause the map unit component to be classified as a "hydric soil." These codes are the paragraph numbers in the hydric soil criteria publication.

Criteria:

1. All Histels except Folistels and Histosols except Folists; or
2. Map unit components in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, or Andic, Cumulic, Pachic, or Vitrandic subgroups that:
   a. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
   b. Show evidence that the soil meets the definition of a hydric soil;
3. Map unit components that are frequently ponded for long duration or very long duration during the growing season that:
   a. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
   b. Show evidence that the soil meets the definition of a hydric soil; or
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
   a. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
   b. Show evidence that the soils meet the definition of a hydric soil.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Lake Gregory Regional Park Sitewide Sedi



November 16, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

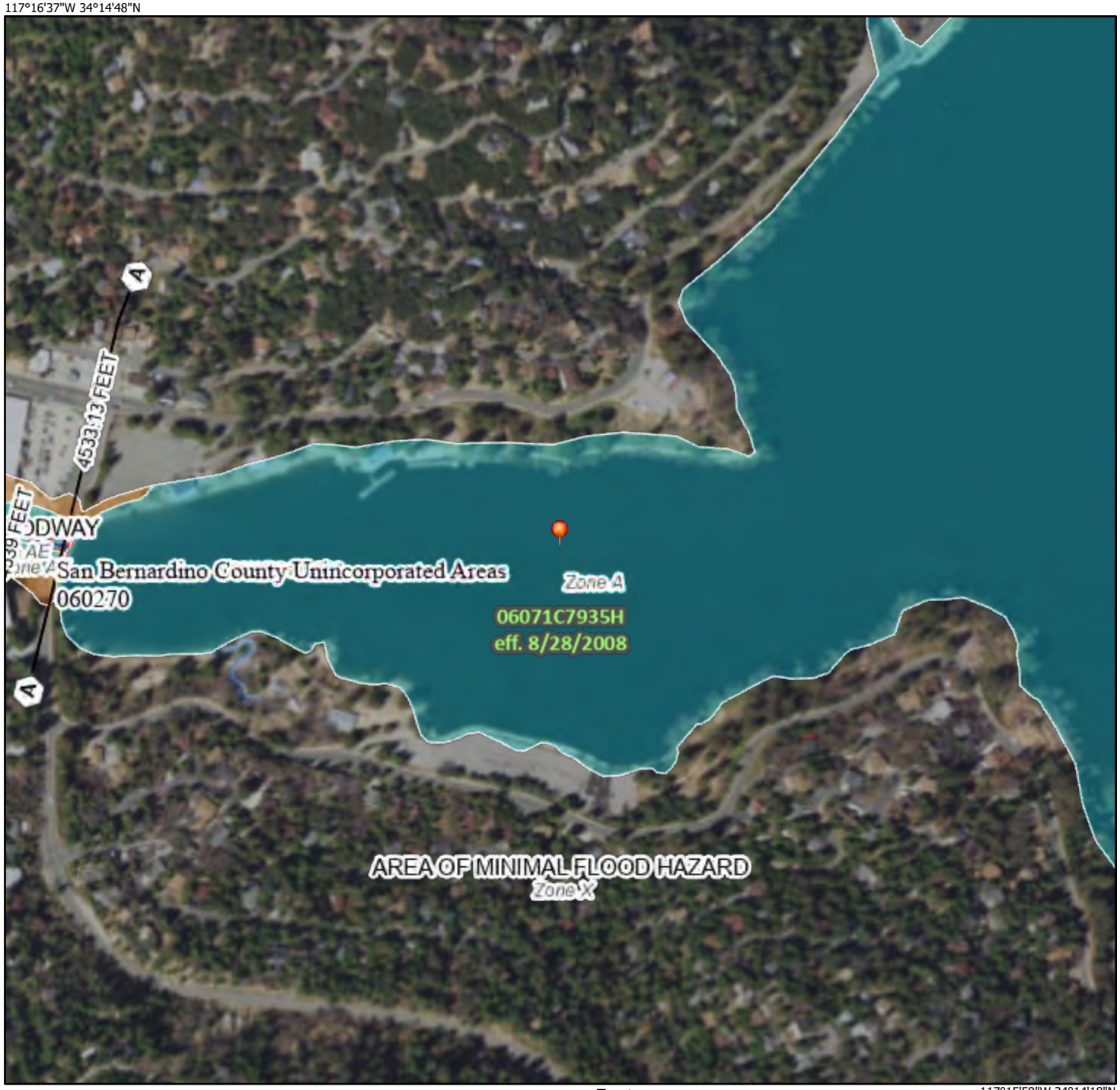
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Flood Hazard Layer FIRMette

FEMA

117°16'37"W 34°14'48"N



117°15'59"W 34°14'18"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/16/2023 at 2:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

117°16'22"W 34°14'52"N

117°15'44"W 34°14'22"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

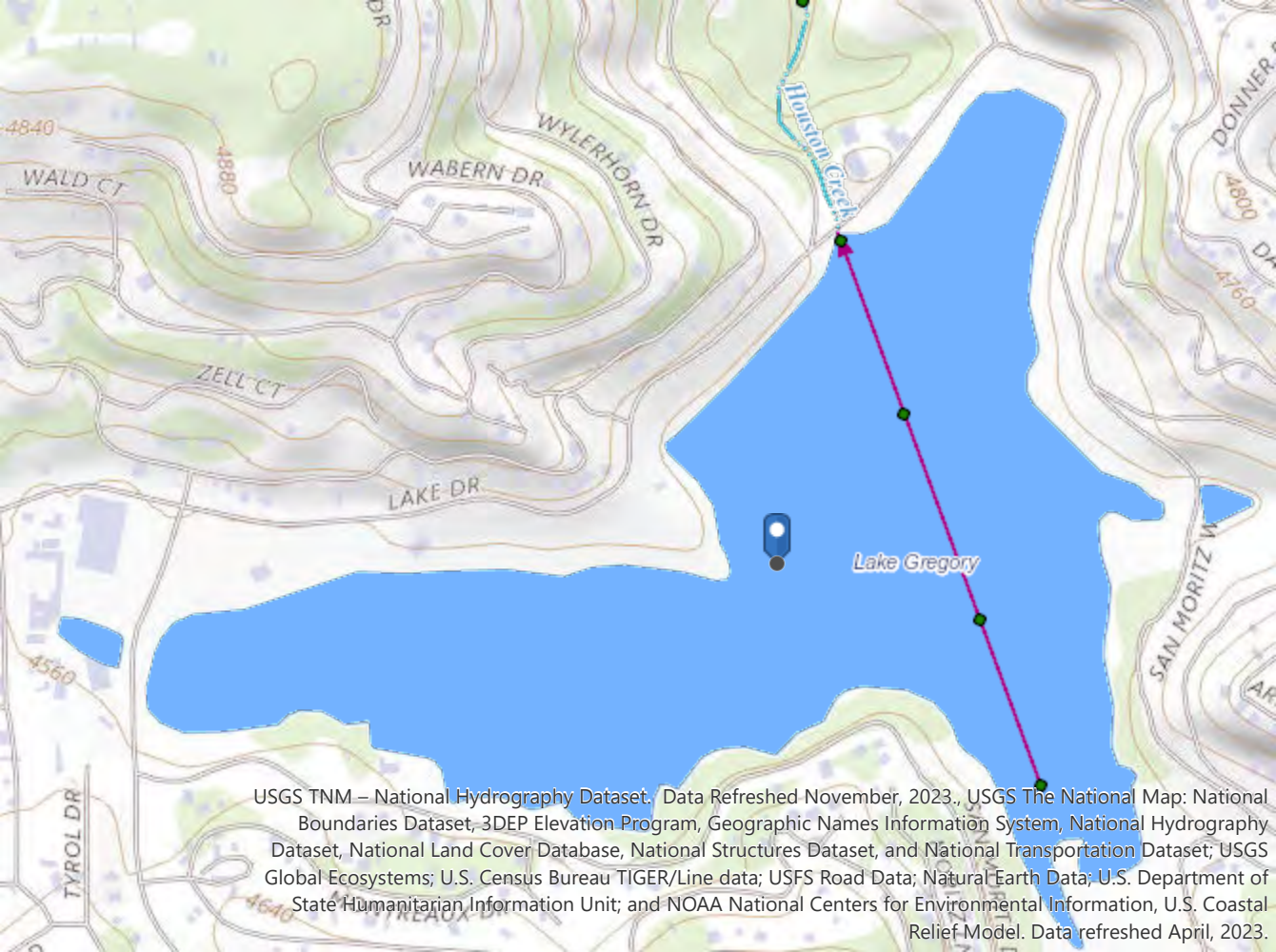
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/16/2023 at 2:31 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



USGS TNM – National Hydrography Dataset. Data Refreshed November, 2023., USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

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INTERNATIONAL

Appendix B:
Site Photographs

Photograph 1: View facing northwest of south beach from the southern shore of Lake Gregory..

Photograph 2: View facing north depicting typical conditions within San Moritz Channel/Sediment Basin from within the channel, with Lake Gregory in the background.

Photograph 3: View facing north towards south basin from the south shore with Lake Gregory in the background.

Photograph 4: View facing west depicting the wetland habitat located at Inlet 11 along the eastern shore of Lake Gregory.

Photograph 5: View facing northwest towards Inlet-13 depicting typical conditions observed at inlets throughout the site.

Photograph 6: View facing north depicting typical conditions within the spillway of Lake Gregory and the headwaters of Houston Creek.

Photograph 7: View facing northeast depicting AF-2a from the south where it is tributary to AF-2..

Photograph 8: View facing north depicting typical conditions within AF-2 in the western portion of the project site.

Michael Baker
INTERNATIONAL

Appendix C:
Wetland Data Forms

Michael Baker
INTERNATIONAL

Appendix C: Wetland Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Lake Gregory Regional Park SSMP City/County: Crestline/San Bernardino Sampling Date: 10/12/23

Applicant/Owner: County of San Bernardino State: Ca Sampling Point: SP1

Investigator(s): John Parent and Stephen Andersen Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): Arid West Lat: 34.243909 Long: -117.265202 Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ____	**Is the Sampled Area within a Wetland?** **Yes ✔ No ____**
Hydric Soil Present?	Yes ✔	No ____	
Wetland Hydrology Present?	Yes ✔	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rhombifolia	80	Y	FACW
2. Salix nigra	20	Y	OBL
3.			
4.			
	100 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Salix laevigata	100	Y	FACW
2.			
3.			
4.			
5.			
	100 = Total Cover		
Herb Stratum (Plot size: _____)			
1. Juncus acutus	40	Y	FACW
2. Urtica dioica	20	Y	FAC
3. Artemisia douglasiana	30	Y	FAC
4.			
5.			
6.			
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✔ No ____**

Remarks:

SOIL

Sampling Point: SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0 - 1	10YR 3/1	100					loamy san	
1 - 8	10YR 4/3	100					sand	coarse grained sand
8 - 12	10YR 2/2	100					loamy san	coarse loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ✔ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR C**)
- ☐ 1 cm Muck (A9) (**LRR D**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR C**)
- ☐ 2 cm Muck (A10) (**LRR B**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Surface water

Depth (inches): 12

Hydric Soil Present? Yes ✔ No ☐

Remarks:

Water table at 6 inches. Below water table soil was colored to 10YR 2/1

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ✔ Saturation (A3)
- ✔ Water Marks (B1) (**Nonriverine**)
- ✔ Sediment Deposits (B2) (**Nonriverine**)
- ✔ Drift Deposits (B3) (**Nonriverine**)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ✔ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1) (**Riverine**)
- ☐ Sediment Deposits (B2) (**Riverine**)
- ☐ Drift Deposits (B3) (**Riverine**)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ✔ Depth (inches): _____

Water Table Present? Yes ✔ No ☐ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes ✔ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ✔ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Near outlet of culvert. Obvious signs of hydrology

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Lake Gregory Regional Park SSMP City/County: Crestline/San Bernardino Sampling Date: 10/12/23

Applicant/Owner: County of San Bernardino State: Ca Sampling Point: SP2

Investigator(s): John Parent and Stephen Andersen Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 5

Subregion (LRR): Arid West Lat: 34.243666 Long: -117.265386 Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** ✔
Hydric Soil Present?	Yes ____	No ✔	
Wetland Hydrology Present?	Yes ____	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus ponderosa	90	Y	FACU
2. Alnus rhombifolia	10	N	FACW
3.			
4.			
	100 = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Salix lasiolepis	100	Y	FACW
2.			
3.			
4.			
5.			
	100 = Total Cover		
Herb Stratum (Plot size: _____)			
1. Hordeum sp.	80		FACU
2. Urtica dioica	20	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ____

Remarks:

SOIL

Sampling Point: SP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0 - 2							duff	
2 - 22	10YR 5/4	100					sand	won't form ribbon

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** ✔

Remarks:

Water table at 6 inches. Below water table soil was colored to 10YR 2/1

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? **Yes** ___ **No** ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix E – Cultural Resources Assessment & AB 52 Letters

CULTURAL RESOURCES ASSESSMENT

Lake Gregory Regional Park Sediment Management Project
Unincorporated Crestline, San Bernardino County, California

Prepared for:

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Prepared by:

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BCR Consulting LLC
505 West 8th Street
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Project No. MBI2304

National Archaeological Data Base (NADB) Information:
Type of Study: Intensive Survey
Resources Recorded: MBI2304-H-1
Keywords: Crestline, Lake Gregory, Reservoir
USGS Quadrangle: 7.5-minute *San Bernardino North, California* (1988)

BCRCONSULTING LLC

February 26, 2024

MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to Michael Baker, Inc. to complete a Cultural Resources Assessment and Historical Evaluation of the proposed Lake Gregory Regional Park Sediment Management Project (project) in Unincorporated Crestline, San Bernardino County, California. The project occupies approximately 105 acres and lies approximately 0.90 miles north of State Route 18. It is surrounded by low-density and forested rural residential properties on all sides. A cultural resources records search, additional research, intensive-level pedestrian field survey, Sacred Lands File Search with the Native American Heritage Commission (NAHC), and vertebrate paleontological resources assessment were conducted for the project in partial fulfillment of Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

The records search revealed that 16 previous cultural resource studies have taken place within or adjacent to the project site, and six cultural resources have been recorded within one half-mile of the project site. One of the previous studies has assessed portions of the project site, and no cultural resources have been previously identified within its boundaries. During the additional research and field survey, BCR Consulting archaeologists identified and recorded the historic-period Lake Gregory, temporarily designated as MBI2304-H-1. BCR Consulting recommends that this resource meets eligibility criteria for the National Register of Historic Places (National Register) and for the California Register of Historical Resources (California Register). As such it is recommended a historic property under Section 106 of the NHPA and is recommended a historical resource under CEQA. However, proposed project activities will not result in significant adverse effects to any character-defining features. Furthermore, disturbances associated with the construction of the lake at the subject property have been severe and have disrupted soil beyond depths at which buried cultural resources are likely. Also, no buried discoveries have occurred in the vicinity of the project site. As a result, the potential to encounter in-situ remains associated with significant archaeological materials during project-related excavation is low. Based on these results no further cultural resource work or mitigations are recommended.

While the current study has not indicated sensitivity for unknown cultural resources within the project boundaries, ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;

- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

Findings were positive during the Sacred Lands File search with the NAHC. The results of the Sacred Lands File search are provided in Appendix D. The State Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the County of San Bernardino will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would “directly or indirectly destroy a unique paleontological resource”. The Paleontological Overview provided in Appendix E has recommended that:

> The geologic units underlying the project area mapped primarily as Holocene aged alluvial gravel and sand surrounding the lake’s perimeter, which is then surrounded by Cretaceous aged quartz monzonite, granodiorite, etc (Dibblee and Minch 2004). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. Cretaceous units like the one described are not considered to be paleontologically sensitive. The Western Science Center does not have localities within the project area or within a 1 mile radius.
>
> While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If human remains are encountered during the project activities, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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INTRODUCTION

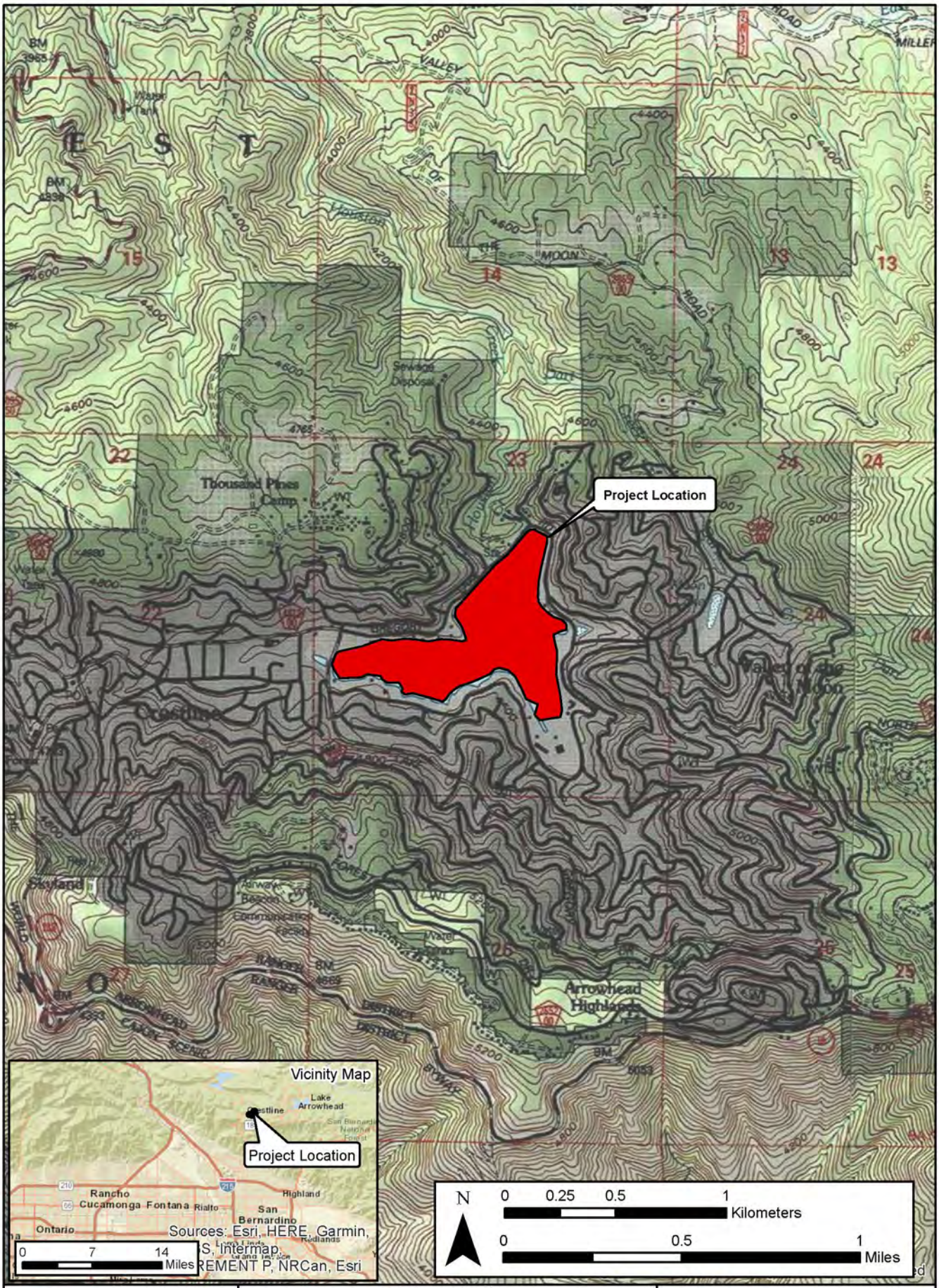
BCR Consulting LLC (BCR Consulting) is under contract to Michael Baker International to complete a Cultural Resources Assessment and Historical Evaluation of the proposed Lake Gregory Regional Park Sediment Management Project (project) in the unincorporated community of Crestline, San Bernardino County, California. A cultural resources records search, additional research, intensive-level pedestrian field survey, Sacred Lands Search with the Native American Heritage Commission (NAHC) and vertebrate paleontological resources assessment were conducted for the project in partial fulfillment of Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA).

Area of Potential Effects and Undertaking/Project

The undertaking, or project, is a restoration/improvement project to construct improvements and maintain lake sediment levels within, and adjacent to Lake Gregory Regional Park in community of Crestline in Unincorporated San Bernardino County, California. The entire Area of Potential Effects (APE) or project location is depicted in Figure 1. It will occupy a portion of Section 23, Township 2 North, Range 4 West (San Bernardino Base and Meridian) and is depicted on the United States Geological Survey (USGS) *San Bernardino North, California* (1988) 7.5-minute topographic quadrangle. The APE consists of areas in which effects/impacts from a proposed undertaking or project to potential historic properties/historical resources could occur. The undertaking, or project, includes:

- Improvement to the Swim Beach area including regrading and placement of a permanent in-water barrier.
- Improvement to the majority of lake inlet locations along the lake perimeter with the addition of headwall structures and rip rap at some inlets.
- Reconstruction and enhancement of an ephemeral channel (San Moritz Channel Basin).
- On-going sediment management and removal of existing and future sediment accumulation.
- Reconstruction and enhancement of an ephemeral channel (San Moritz Channel Basins) including routine maintenance of Lake Gregory, San Moritz Channel Basins, and Library Basin, including Lake Gregory beach grading, lake and basin structural repairs and debris/trash removal, inlet/outlet repairs, access road and appurtenant structure repairs, slope repairs, maintenance of lake water surface/water quality operational standards, vector control (see Table 3 below).

Swim Beach. The existing swim beach has deteriorated over time and has uneven beach area, large potholes, depressions, and steep slopes. The goal of the improvements to the swim beach area is to improve public safety including Americans with Disabilities Act (ADA) compliance and the waterpark attraction, which serve as a venue for day camps, sporting events, training, and education.



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Project Location Site
Lake Gregory Regional Park
Sitewide Sediment Managment Project
Reference: ESRI; USGS Quad: San Bernardino North, California (1988)

Figure 1

Michael Baker International

The proposed improvements in this area include flattening the beach area to a uniform 12:1 slope, and the installation of an in-water, beach stabilization wall to create a horizontal and vertical grade control marker defining the beach. The stabilization wall would be placed in-water and would be approximately 6-inches wide, spanning from the north to south shore. The beach stabilization wall will be constructed to create a horizontal and vertical grade control marker defining the beach. Future maintenance crews can use the top of beach stabilization wall as a vertical marker to restore grades when grooming the beach sand in the beach area. A portion of the lake invert in the vicinity of the West Beach will be graded to create a deepened area that will have a minimum 10ft of water depth at the typical lowest water level during the swim season.

Lake Inlets. There are numerous storm drain inlets/outlets that exhibit significant erosion. In some areas erosion is extreme and has undermined the storm drain and created a potentially dangerous situation. These inlets range in size from 4-36 inches. At some inlet locations there are multiple inlet features (i.e., more than one pipe). These inlets function to maintain the water level at the lake. As part of the improvement Project, a new headwall/weir box would be installed at approximately 19 inlet locations, and riprap pads would be installed at approximately 22 inlet locations. Overall, twenty-two (22) inlet locations would be reconstructed to remediate the erosion damage and install erosion control/protection measures that will limit future erosion damage. Riprap would be installed near all basin inlets to prevent erosion (approximately 375 square-foot footprint per site). The basin weir box outlet structure is intended to retain sediment in the basin and decrease the likelihood of it flowing through the basin into Lake Gregory.

San Moritz Channel Basins. Historically, sediment also accumulates at the southerly tip of the lake near Houston Creek South outlet to the lake adjacent to San Moritz Lodge and along the bank at the Houston Creek East outlet to the lake. The Houston Creek South outlet to the Lake Gregory located adjacent to the San Moritz Lodge was previously improved by constructing an in-line multi-cell debris basin and improving the existing access road by paving over it with approximate 14-foot-wide soil cement armoring along the northern and western perimeter of the existing baseball field for maintenance and vehicular access. The project will improve the site by re-stabilizing the inflow to the lake. All stockpile materials will be trucked to Camp Switzerland. Earthwork quantities are estimated at 26,300 cubic yards imported and exported, for a duration of 35 days. The project does not require use of pile drivers or vibratory rollers.

Operational and Maintenance Activities. The project includes a maintenance element, the creation and implementation of the *2024 Lake Gregory Operations and Maintenance Manual Update* ("O&M Manual"). The O&M Manual incorporates required maintenance activities for each distinct area of the lake including the debris basins and creek outlets (inlets) into the lake. Each area has unique physical characteristics that require ongoing operations and maintenance. Routine maintenance of the lake and adjacent basins is essential to improve water clarity and quality, enhance recreational features, and improve fishery habitat resources of the lake. The O&M Manual includes year-round maintenance activities with seasonal restrictions on certain activities. The below routine O&M elements are summarized below in Table A.

Table A. Operation and Maintenance Elements

Location	O&M Elements	Schedule / Frequency	Maintenance Equipment
Swim Beach	Swim beach area lake bottom footfall and/or foot contact grooming	As necessary, limited to the Park Non-operational season (September through March)	Debris rakes, power boat pulled drag
Lake Inlets	Regular visual inspection and removal of debris	quarterly basis year-round and before each forecast storm	Hand tools/hand
San Moritz Channel Basins	Sediment Removal Channel/Basin Lake Delta Dredging Maintenance of Access Road and other Appurtenances	Semi-annual basis, after large storm events (Sediment Removal) Between Labor Day and March 1st (Dredging)	Tracked excavator with minimum reach of 30-ft Wheeled loader with 3-yard bucket Three-axle dump truck
Library Basin	Sediment Removal Maintenance of Access Road and other Appurtenances Storm Damage Repair and Restoration Projects	Semi-annual basis, after large storm events (Sediment Removal)	Tracked excavator with minimum reach of 30-ft Wheeled or tracked mini-skid steer (Bobcat) Three-axle 10-yd dump truck
Lake (Sitewide)	Lake Ecology Control/Monitoring Program Lake Water Surface Maintenance Algae, Aquatic Plant and Turbidity Control Insect Control Erosion Control Trash Collection	Ranging from daily to annually	

General maintenance activities to mitigate problems related to floating debris, water clarity, dissolved oxygen, algae, aquatic plant growth, vector control, waterfowl population, water level, rule enforcement, and maintenance of a chronological record of pertinent data are also addressed under operations and maintenance. These activities will not result in any potential for effects to cultural resources and are not described in detail here.

Regulatory Setting

National Environmental Policy Act. The National Environmental Policy Act (NEPA), as amended, establishes the federal policy of protecting important historic, cultural, and natural aspects of our national heritage during federal project planning. All federal or federally assisted projects requiring action pursuant to Section 102 of NEPA must take into account the effects on cultural resources. According to the NEPA regulations, in considering whether an action may “significantly affect the quality of the human environment,” an agency must consider, among other things, unique characteristics of the geographic area such as proximity to historic or cultural resources (40 Code of Federal Regulations [C.F.R.] § 1508.27[b][3]) and the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places (National Register). NEPA regulations also require that, to the fullest extent

possible, agencies shall prepare draft Environmental Impacts Statements (EISs) concurrently with and integrated with environmental impact analyses and related surveys and studies required by the National Historic Preservation Act (NHPA). When Section 106 of the NHPA and NEPA are integrated, project actions that cause adverse effects under Section 106 are usually considered to be significant under NEPA.

Section 106 of the National Historic Preservation Act. The NHPA establishes the federal government policy on historic preservation and the programs, including the National Register, through which this policy is implemented. Under the NHPA, significant cultural resources (referred to as historic properties) include any prehistoric or historic district, site, building, structure, or object included in, or determined eligible for inclusion in, the National Register.

Historic properties also include resources determined to be National Historic Landmarks. National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting United States heritage. A property is considered historically significant if it meets one of the National Register criteria and retains sufficient historic integrity to convey its significance. This act also established the Advisory Council on Historic Preservation, an independent agency responsible for implementing Section 106 of NHPA by developing procedures to protect cultural resources included in, or eligible for inclusion in, the National Register. Regulations are published in 36 C.F.R. Parts 60, 63, and 800.

National Historic Preservation Act Implementing Regulations (36 Code of Federal Regulations § 800). Section 106 of the NHPA requires that effects on historic properties be taken into consideration in any federal undertaking. The process has five steps: (1) initiating the Section 106 process, (2) identifying historic properties, (3) assessing adverse effects, (4) resolving adverse effects, and (5) implementing stipulations in an agreement document. The implementing regulations for Section 106 are at 36 C.F.R. Part 800. Section 106 affords the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO), as well as other consulting parties, a reasonable opportunity to comment on any undertaking that would adversely affect historic properties. SHPOs administer the national historic preservation program at the state level, review National Register nominations, maintain data on historic properties that have been identified but not yet nominated, and consult with federal agencies during Section 106 review.

National Register of Historic Places Eligibility (Section 106). Eligibility for the National Register rests on two factors: significance and integrity. In order to be eligible for inclusion in the National Register, a property must meet one or more of the significance criteria listed below (36 C.F.R. § 60.4) and retain integrity:

- Criterion A—Association with “events that have made a significant contribution to the broad patterns of our history.”
- Criterion B—Association with “the lives of persons significant in our past.”
- Criterion C—Resources “that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess

high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction."

- Criterion D—Resources "that have yielded, or may be likely to yield, information important to history or prehistory."

The National Register bulletin entitled *How to Apply the National Register Criteria for Evaluation* states that in order for a property to qualify for listing in the National Register, it must meet at least one of the National Register criteria by: (1) being associated with an important historic context, and (2) retaining historic integrity of those features necessary to convey its significance (National Park Service 1997). The historic context of a resource will define the theme(s), geographical limits, and period of significance by which to evaluate a resource's significance (National Park Service 1997:7). Generally, cultural properties must be 50 years of age or more to be eligible for listing in the National Register. According to the National Park Service (1997:2), "properties that have achieved significance within the past 50 years shall not be considered eligible" unless such properties are "of exceptional importance."

In addition to being significant under one or more of these criteria, National Register eligibility (as well as California Register of Historical Resources [California Register] eligibility, as described below) requires that a resource retain sufficient integrity to convey its significance. Integrity is evaluated through consideration of characteristics that existed during a resource's period of significance. Integrity is evaluated with regard to the retention of seven elements:

- Location—The place where the resource was constructed
- Design—The combination of elements that create the form, plans, space, structure, and style of the resource
- Setting—The physical environment of the resource, including the landscape and spatial relationship of the buildings
- Materials—The physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the resource
- Workmanship—The physical evidence of the crafts of a particular culture or people during any given period of history
- Feeling—The resource's expression of the aesthetic or historic sense of a particular period of time
- Association—The direct link between an important historic event or person and a resource

The NHPA allows properties of traditional religious and cultural importance to a Native American tribe to be eligible for National Register inclusion (Section 101(d)(6)(A)). Additionally, a broader range of traditional cultural properties is also considered and may be eligible for or listed in the National Register. Traditional cultural properties are places associated with the cultural practices or beliefs of a living community that are rooted in that community's history and that may be eligible because of their association with cultural practices or beliefs of living communities that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. In the National

Register programs, culture is understood to mean the traditions, beliefs, practices, lifeways, arts, crafts, and social institutions of any community, be it an Indian tribe, a local ethnic group, or the nation as a whole (Parker and King 1998).

NHPA Section 106 Native American Consultation. Section 106 of the NHPA requires tribal consultation in all steps of the process when a federal agency project or effort may affect historic properties that are either located on tribal lands, or when any Native American tribe or Native Hawaiian organization attaches religious or cultural significance to the historic property, regardless of the property's location (U.S. General Services Administration 2022).

The California Environmental Quality Act. CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations 14(3), § 15002(i)). Under CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (Cal. Code Regs. tit. 14(3), § 15064.5(b)). State CEQA Guidelines section 15064.5(a) defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register
- Listed in a local register of historical resources (as defined at Cal. Public Res. Code § 5020.1(k))
- Identified as significant in a historical resource survey meeting the requirements of § 5024.1(g) of the Cal. Public Res. Code
- Determined to be a historical resource by a project's lead agency (Cal. Code Regs. tit. 14(3), § 15064.5(a))

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California…Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (Cal. Code Regs. tit. 14(3), § 15064.5(a)(3)).

The significance of a historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the California Register. If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (State CEQA Guidelines § 15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project will have on the resource.

Section 5024.1 of the Cal. Public Res. Code established the California Register. Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register (Cal. Code Regs. tit. 14(3), § 15064.5(a)(3)). The eligibility criteria for the California Register are similar to those of the National Register, and a resource that meets one or more of the eligibility criteria of the National Register will be eligible for the California Register. The California Register program encourages public recognition and protection of resources of architectural, historical,

archaeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under CEQA. Criteria for Designation:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. Associated with the lives of persons important to local, California or national history.
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). Fifty years is normally considered sufficient time for a potential historical resource, and in order that the evaluation remain valid for a minimum of five years after the date of this report, all resources older than 45 years (i.e. resources from the "historic-period") will be evaluated for California Register listing eligibility, or CEQA significance. The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association. Finally, CEQA requires that significant effects on unique archaeological resources be considered and addressed. CEQA defines a unique archaeological resource as any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Guidelines Section 15064.5 Appendix G includes significance criteria relative to archaeological and historical resources. These have been utilized as thresholds of significance here, and a project would have a significant environmental impact if it would:

a) cause a substantial adverse change in the significance of a historical resource as defined in section 10564.5;
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 10564.5;
c) Disturb any human remains, including those interred outside of formal cemeteries.

Tribal Cultural Resources. The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the County of San Bernardino will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff are available to answer questions and address comments as necessary.

Paleontological Resources. CEQA provides guidance relative to significant impacts on paleontological resources, indicating that a project would have a significant impact on paleontological resources if it disturbs or destroys a unique paleontological resource or site or unique geologic feature. Section 5097.5 of the California Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, California Penal Code Section 622.5 sets the penalties for damage or removal of paleontological resources. CEQA documentation prepared for projects would be required to analyze paleontological resources as a condition of the CEQA process to disclose potential impacts. Please note that as of January 2018 paleontological resources are considered in the geological rather than cultural category. Therefore, paleontological resources are not summarized in the body of this report. A paleontological overview completed by the Western Science Center is provided as Appendix E.

NATURAL SETTING

The elevation of the project site is approximately 4550 feet above mean sea level (AMSL). The project site is situated in the San Bernardino Mountains of the Transverse Ranges, an east-west oriented physiographic feature located to the north of the Los Angeles Basin and south of the Mojave Desert (Norris and Webb 1990:320). The San Bernardino's are relatively young for their great height, which exceeds 11,000 feet at Mt. San Gorgonio (Trent 1990). Rainfall averages approximately 20 to 40 inches, with higher rain levels and snow common above 4,000 feet AMSL (Miles and Goudey 1997). Some of the abundant local streams have created natural lakes, and others have been channelized and dammed to form artificial reservoirs. The nearest water source is Houston Creek, which terminates in Mojave River (USGS 1988). The project site has been subject to grading for local roads, the original construction of Lake Gregory in 1933 and the dam rehabilitation in 2019.

Common tree species include Jeffrey pine (*Pinus Jeffreyi*), Ponderosa pine (*Pinus ponderosa*), Coulter pine (*Pinus coulteri*), knobcone pine (*Pinus attenuata*), sugar pine (*Pinus Lambertiana*), limber pine (*Pinus flexilis*), lodgepole pine (*Pinus contorta*), incense

cedar (*Calocedrus decurrens*), sycamore (*Platanus spp.*), white alder (*Alnus rhombifolia*), and white fir (*Abies concolor*). Montane meadow habitat is also locally present in which various native herbs, grasses, and shrubs accompany a high diversity of birds and mammals, and some amphibians (see Williams 2008: 335-342).

CULTURAL SETTING

Prehistory

Many regional syntheses have been utilized in the archaeological literature for southern California. The following framework derives information from local studies to provide a useful overview for the project site.

Paleoindian (12,000 to 10,000 BP) and Lake Mojave (10,000 to 7,000 BP) Periods. Climatic warming characterizes the transition from the Paleoindian Period to the Lake Mojave Period. This transition also marks the end of Pleistocene Epoch and ushers in the Holocene. The Paleoindian Period has been loosely defined by isolated fluted (such as Clovis) projectile points, dated by their association with similar artifacts discovered in-situ in the Great Plains (Sutton 1996:227-228). Some fluted bifaces have been associated with fossil remains of Rancholabrean mammals approximately dated to ca. 13,300-10,800 BP near China Lake in the Mojave Desert. The Lake Mojave Period has been associated with cultural adaptations to moist conditions, and resource allocation pointing to more lacustrine environments than previously (Bedwell 1973). Artifacts that characterize this period include stemmed points, flake and core scrapers, choppers, hammerstones, and crescentics (Warren and Crabtree 1986:184). Projectile points associated with the period include the Silver Lake and Lake Mojave styles. Lake Mojave sites commonly occur on shorelines of Pleistocene lakes and streams, where geological surfaces of that epoch have been identified (Basgall and Hall 1994:69)

Pinto Period (7,000 to 4,000 BP). The Pinto Period has been largely characterized by desiccation of southern California. As formerly rich lacustrine environments began to disappear, the artifact record reveals more sporadic occupation of the drier regions, indicating occupants' recession into the cooler fringes (Warren 1984). Pinto Period sites are rare, and are characterized by surface manifestations that usually lack significant in-situ remains. Artifacts from this era include Pinto projectile points and a flake industry similar to the Lake Mojave tool complex (Warren 1984), though use of Pinto projectile points as an index artifact for the era has been disputed (see Schroth 1994). Milling stones have also occasionally been associated with sites of this period (Warren 1984).

Gypsum Period. (4,000 to 1,500 BP). A temporary return to moister conditions during the Gypsum Period is postulated to have encouraged technological diversification afforded by the relative abundance of available resources (Warren 1984:419-420; Warren and Crabtree 1986:189). Lacustrine environments reappear and begin to be exploited during this era (Shutler 1961, 1968). Concurrently a more diverse artifact assemblage reflects intensified reliance on plant resources. The new artifacts include milling stones, mortars, pestles, and a proliferation of Humboldt Concave Base, Gypsum Cave, Elko Eared, and Elko Corner-notched dart points (Warren 1984; Warren and Crabtree 1986). Other artifacts include leaf-shaped projectile points, rectangular-based knives, drills, large scraper planes, choppers,

hammer stones, shaft straighteners, incised stone pendants, and drilled slate tubes. The bow and arrow appears around 2,000 BP, evidenced by the presence of a smaller type of projectile point, the Rose Spring point (Rogers 1939; Schroeder 1953, 1961; Shutler 1961; Yohe 1992).

Saratoga Springs Period (1,500 to 800 BP). During the Saratoga Springs Period regional cultural diversifications of Gypsum Period developments are evident. Influences from Patayan/Yuman assemblages are apparent in the southern inland areas, and include buff and brown wares often associated with Cottonwood and Desert Side-notched projectile points (Warren 1984:423). Obsidian becomes more commonly used throughout southern California and characteristic artifacts of the period include milling stones, mortars, pestles, ceramics, and ornamental and ritual objects. Large villages evidence more structured settlement patterns, and three types of identifiable archaeological sites (major habitation, temporary camps, and processing stations) emerge (McGuire and Hall 1988). Diversity of resource exploitation continues to expand, indicating a much more generalized, somewhat less mobile subsistence strategy.

Shoshonean Period (800 BP to Contact). The Shoshonean period is the first to benefit from contact-era ethnography –and is subject to its inherent biases. Interviews of living informants allowed anthropologists to match artifact assemblages and particular traditions with linguistic groups, and plot them geographically (see Kroeber 1925; Gifford 1918). During the Shoshonean Period, continued diversification of site assemblages and reduced Anasazi and Yuman influence both coincide with the expansion of Numic (Uto-Aztecan language family) speakers across the Great Basin, Takic (also Uto-Aztecan) speakers into southern California, and the Hopi across the Southwest (Sutton 1996). Hunting and gathering continued to diversify, and the diagnostic arrow points include desert side-notch and cottonwood triangular, which have been locally recorded. Ceramics continue to proliferate, though are more common in the desert during this period (Warren and Crabtree 1986). Trade routes have become well established between coastal and inland groups during this period.

Ethnography

Serrano. Kroeber (1925) applied the generic term “Serrano” to four groups, each with distinct territories: the Kitanemuk, Tataviam, Vanyume, and Serrano. Only one group, in the San Bernardino Mountains and West-Central Mojave Desert, ethnically claims the term Serrano. Bean and Smith (1978) indicate that the Vanyume, an obscure Takic population, was found along the Mojave River at the time of Spanish contact. The Kitanemuk lived to the north and west, while the Tataviam lived to the west. All may have used the western San Bernardino County area seasonally. Serrano villages consisted of small collections of willow-framed domed structures situated near reliable water sources. A lineage leader administered laws and ceremonies from a large ceremonial house centrally located in most villages. Local Serrano relied heavily on acorns and piñon nuts for subsistence, although roots, bulbs, shoots, and seeds supplemented these. When available, game animals commonly included deer, mountain sheep, antelope, rabbits, small rodents, and various birds –particularly quail (Bean and Smith 1978:571).

History

Historic-era California is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present).

Spanish Period. The first European to pass through the area is thought to be a Spaniard called Father Francisco Garces. Having become familiar with the area, Garces acted as a guide to Juan Bautista de Anza, who had been commissioned to lead a group across the desert from a Spanish outpost in Arizona to set up quarters at the Mission San Gabriel in 1771 near what today is Pasadena (Beck and Haase 1974). Garces was followed by Alta California Governor Pedro Fages, who briefly explored the region in 1772. Searching for San Diego Presidio deserters, Fages had traveled through Riverside to San Bernardino, crossed over the mountains into the Mojave Desert, and then journeyed westward to the San Joaquin Valley (Beck and Haase 1974).

Mexican Period. In 1821, Mexico overthrew Spanish rule and the missions began to decline. By 1833, the Mexican government passed the Secularization Act, and the missions, reorganized as parish churches, lost their vast land holdings, and released their neophytes (Beattie and Beattie 1974).

American Period. The American Period, 1848–Present, began with the Treaty of Guadalupe Hidalgo. In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. The cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. However, beginning about 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure. A series of disastrous floods in 1861–1862, followed by a significant drought further diminished the economic impact of local ranching. This decline combined with ubiquitous agricultural and real estate developments of the late 19th century, set the stage for diversified economic pursuits that have continued to proliferate to this day (Cleland 1941).

Crestline. The community of Crestline has been called many names since the 1850's. In 1852, it was named Mormon Springs. It was known as Houston Flats, Crest City, Pine Mont, and Camp Lincoln before it acquired the name Crestline in 1906 by way of a naming competition (San Bernardino County Sun, 24 July 1906: 6). The historic period of Crestline begins with an influx of Mormon migrants from Salt Lake City in a portion of Rancho San Bernardino that was purchased from the Lugo family and named San Bernardino (Robinson 1989). As the Mormon population started to expand, it became apparent that more lumber then was available in the valley would be necessary. In 1852, over the course of two weeks, every able-bodied man from San Bernardino, cleared and graded the first road through Hot Springs Canyon to the top of the mountain to gain access to the plethora of lumber within the San Bernardino Mountain range (Robinson 1989, Mountain Courier, 1 October 1976: 15). This created a lumber boom in the area and by 1854 there were six lumber mills in the area that helped fuel the development of Los Angeles and the San Bernardino area

(Robinson 1989). With the creation of the road, the area became open to tourists. In 1899, the area was known as Camp Lincoln and was a famous meeting place for social and intellectual entertainments with the likes of Captain William Holcomb, Professor William Stephens, General Brown, and Lieutenant Hurley (San Bernardino County Sun, 13 August 1899: 6). By 1906, the area was still a camping spot until Henry Guernsey, a lumberman, purchased 630 acres of cut-over land from the San Bernardino Lumber and Box Company, owned by Arthur Gregory of Redlands, for 11,000 dollars (Robinson 1989). Guernsey planned to subdivide the land and began to lay out streets, dig wells, and install water mains, and he built himself a house. The plots of land quickly sold, and the community was called "Summer City in the Pines" before it was renamed Crestline (Robinson 1989). The first postmaster for Crestline was S.W. Dillon who was a Hollywood screenwriter that suffered from asthma and moved to the mountain area to help his breathing. Dillon purchased an old cement warehouse and converted it to the Crestline Tavern, and in 1920 the Skyland post office was moved into the store (Robinson 1989). The first school opened in September of 1929 after enrolling seven students, the required minimum for Rim of the World School District (Mountain Courier, 18 June 1971: 34). Throughout the 1920's, Crestline would see the development of several new subdivisions (Robinson 1989). In the 1930's, Lake Gregory was constructed, expanding the local tourism industry that would continue through the boom of post-WWII economic development (Robinson 1989; see Additional Research below).

PERSONNEL

David Brunzell, M.A., RPA acted as the Project Manager and Principal Investigator for the current study. BCR Staff Archaeologists John Defachelle, B.A. and Kainoa Heskett, B.A. completed the fieldwork. BCR Consulting Project Manager Joseph Orozco, M.A. completed the records search at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. David Brunzell wrote the technical report with contributions from BCR Consulting Field Director Nicholas Shepetuk, B.A. and Archaeological Crew Chief Timothy Blood, M.S. Mr. Blood completed additional research and the Department of Parks and Recreations Form 523 (DPR 523) for Lake Gregory.

METHODS

This work was completed pursuant to CEQA, the Public Resources Code (PRC) Chapter 2.6, Section 21083.2, and California Code of Regulations (CCR) Title 14, Chapter 3, Article 5, Section 15064.5 and Section 106 of the NHPA. The pedestrian cultural resources survey was intended to locate and document previously recorded or new cultural resources, including archaeological sites, features, isolates, and historic-period buildings, that exceed 45 years in age within defined project boundaries. The outer shore of the lake was examined on foot using 15 meter transect intervals, where accessible. This study is intended to determine whether cultural resources are located within the project boundaries, whether any cultural resources are significant pursuant to the above-referenced regulations and standards, and to develop specific mitigation measures that will address potential impacts to existing or potential resources. Tasks pursued to achieve that end include:

- Vertebrate paleontology resources report through The Western Science Museum

- Cultural resources records search to review studies conducted in the immediate vicinity and documentation of cultural resources recorded within a one half-mile radius of the project boundaries
- Additional research through various local and regional archives and repositories
- Systematic pedestrian survey of the entire project site
- Evaluation of any cultural resources identified for National Register and California Register listing eligibility
- Development of recommendations for cultural resources documented within the project boundaries, following Section 106 of the NHPA and CEQA
- Completion of DPR 523 forms for any discovered cultural resources.

Research

Records Search. On July 6, 2023 (prior to the field survey) a records search was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. This archival research reviewed the status of all recorded historic and prehistoric cultural resources recorded within one half-mile of the project site, and survey and excavation reports completed within or adjacent to the project site. Additional resources reviewed included the National Register, the California Register, and documents and inventories published by the California Office of Historic Preservation (OHP). These include the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

Additional Research and Historic Context. BCR Consulting performed additional research through records of the General Land Office Maintained by the Bureau of Land Management, the Rim of the World Historical Society, the San Bernardino County Library, the San Bernardino County Assessor, and through various Internet resources. This research is performed to provide the land use history of the project site, and to provide a historic context for any historic-period cultural resources indicated by the research or field survey.

Field Survey

An intensive-level cultural resources field survey of the project site was conducted on November 30, 2023 and December 1, 2023. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across along the Lake Greagory Shoreline, where accessible. Cultural resources and features of Lake Gregory were recorded on DPR 523 forms. Digital photographs were taken at various points within the project site. These included overviews as well as detail photographs of all cultural resources. Cultural resources were recorded per the California OHP *Instructions for Recording Historical Resources* in the field using:

- Detailed note taking for entry on DPR 523 Forms (see Appendix B)
- Hand-held Garmin Global Positioning systems for mapping purposes
- Digital photography of all cultural resources (see Appendix B and C).

RESULTS

Research

Records Search. Data from the SCCIC revealed that 16 previous cultural resources studies have taken place within or adjacent to the project site, and six cultural resources have been recorded within one half-mile of the project site. One of the previous studies have assessed portions of the project site, and no cultural resources have been previously recorded within its boundaries. The records search is summarized as follows:

Table B. Cultural Resources and Reports Within the Project Site Study Radius

USGS 7.5 Min Quadrangle	Cultural Resources Within One Half-Mile of Project Site	Studies Within One Half Mile
San Bernardino N, (1988)	P-36-12789: Historic-Period Bldg. Foundation/Well (Adjacent SE) P-36-13426: Historic-Period Bldg. Foundation/Wall (Adjacent S) P-36-13429: Historic-Period Bldg. Foundation/Wall (Adjacent E) P-36-20287: Historic-Period Refuse (1/2 Mile Northwest) P-36-24767: Historic-Period Road (Adjacent West and South) P-36-26759: Unspecified Resource (Adjacent West)	SB-3039, 4242, 4967, 4969, 5016, 5020, 5447*, 5451, 5895 6644, 6761, 6995, 7640, 8091,
Silverwood Lake (1988)	None	SB-2845, 6048

*Within the project site boundaries.

Additional Research and Historic Context. Additional research was performed for the project site to provide a context for the historic-period Lake Gregory and to establish a framework for National Register and California Register eligibility evaluation. Citations are included for this section in Appendix B.

Lake Gregory History. The site that Lake Gregory occupies was originally called Houston Flat. The lake was named after Arthur Gregory who was an accomplished businessman from Redlands. Mr. Gregory began his career as a farm hand, and he slowly acquired and developed an operation of approximately 40 fruit packing houses and hundreds of acres of fruit orchards and cattle ranches. Gregory would eventually purchase 1,500 acres of land in the Crest Forest to source timber for crates to ship his fruit. Gregory's land and other land in the area owned by Bessie Cathcart of San Bernardino, would later be donated as site for Lake Gregory.

During the summer of 1935, Gregory saw the need and value in creating the lake as a water supply and for public recreation at the Houston Flat location. This would lead him to form a committee in December of 1935 consisting of local residents to petition for the creation of a water district so that funds could be raised for the project. By January of 1936, an official charter was issued by the secretary of state in Sacramento, legally recognizing the Crest Forest County Water District. On March 3, 1936, an election was held to elect a board of directors to govern the new district. Members selected included Arthur Gregory, Frederick Spencer, Noble Whittemore, Bessie Cathcart, and Art Manning. The first action that the board of supervisors would take was to file an application with the Works Progress Administration (WPA) for government assistance in creation of the lake and dam. The total cost for the construction of the lake and dam would total 225,000 dollars and the WPA

approved and allocated approximately 178,000 dollars for the project, the rest of the funds would be put forward by the newly formed Crest Forest County Water District.

Establishment of Depression-era Federal Programs. When Franklin Delano Roosevelt took office in 1932, his primary focus was mitigation of the economic devastation of the Great Depression by every means at his disposal. His administration launched a flurry of programs aimed at economic stabilization and putting the 13 million unemployed Americans back to work beginning with the National Industrial Recovery Act of 1933 (NIRA). Hugh S. Johnson, a retired World War I general, was put in charge of its implementation through the National Recovery Administration (NRA). Johnson's agency attempted to develop a planned economy through agreements with businesses to pay minimum wages, limit working hours, and prevent child labor. The NRA also tried to impose price controls and encouraged American consumers to boycott businesses that did not sign on and publicly display support for its program.

The economic controls of the NRA were intended to work in concert with a comprehensive nationwide public works program that was established as Title 2 of the NRA. Known as the Public Works Administration (PWA), it was initially given $3.3 billion to fund infrastructure projects. It was a stimulus rather than an unemployment program; the PWA provided loans and grants to state and local governments. These non-federal agencies developed projects, chose contractors, and typically shared project costs. PWA projects hired local workers but did not require that they be currently unemployed (The Living New Deal 2016). By the end of 1933, the PWA had funded nearly 20,000 projects, about one fifth of which were state or local (Leighninger 2007). In 1935, the US Supreme Court ruled the NRA unconstitutional, but the PWA survived and was able to continue its work. Many other programs were established to combat unemployment and put the US economy back on course. The Civilian Conservation Corps put unemployed men to work on public lands beginning in 1933. In 1935, the Second New Deal began establishing additional programs, most notably the Works Progress Administration (WPA), which was the largest and is today the most widely remembered of the federal measures taken to combat the Great Depression. The WPA was a direct employment program: it hired unemployed Americans to work on an extremely diverse array of infrastructure and arts projects over its eight years of existence.

PWA Legacy in California. By the end of 1938, the PWA had funded nearly 26,000 projects throughout the US, about 40 percent of which were non-federal. Public housing, schools, prisons, state capitols, post offices, and all types of infrastructure were through the PWA. 2,200 of the buildings constructed by the program were part of larger power, sewer, or water supply infrastructure projects. The most ambitious and largest in scope of its projects were the great dams of the 1930s; some of the most famous bridges of the era were also PWA-funded. The inception of the PWA coincided with the passage of the Field Act in California, which banned construction of unreinforced masonry and set seismic resistance standards after the 1933 Long Beach earthquake.

At the end of the decade, a PWA book summing up the achievements and challenges of the program credited California architects working on PWA projects with having evolved what amounted to a new architectural design movement. California craftsman developed the use of gunite in construction as well as achieving the highest aesthetic standards for concrete

finish, and many of the aesthetically outstanding buildings of the program were in California. California designers were credited by PWA administrators with improving the visual appeal of sewage and water supply buildings, specifically noting that advances in the use of concrete as a finishing material had allowed utilitarian buildings to "become structures of great aesthetic merit." California projects completed under the PWA include architectural landmarks such as the Golden Gate Bridge, Chaffey Junior College library in Ontario, and Alameda County Courthouse as well as post offices, city halls, and dozens of school buildings. Infrastructure projects are less famous but equally important and include sewage treatment plants in Laguna Beach, Newport, and El Monte as well as reinforced concrete water reservoirs in Whittier and Sacramento.

Development of Lake Gregory. Work on Lake Gregory began soon after WPA funded the project in October 1936. Changes in WPA allotment rules almost stopped the project by causing a shortage in funds of 20,000 dollars. Fortunately, the money was ultimately supplied by donations raised by the Crest Forest County Water District. By August 1937, work had begun removing trees and brush from the bed of the lake. A force of 150 men began work at the project and this would eventually increase to 250 men. The project was designed by engineers W.P. Rowe and R.B. Ward and the WPA labor force was managed by WPA District Manager Ralph Smith. The construction of the lake and dam took approximately fourteen months and was finished in January of 1938. The dam was constructed of rock and earth and stood 75 feet high. It was estimated that it would take a year to fill the lake but a record setting amount of rainfall from late February to early March of 1938 filled the 95-acre lake in a matter of three days. The lake retained its original configuration until 2019 when the dam was deemed hazardous by the California Division of Safety of Dams because it did not meet seismic safety standards. The dam went under a retrofit which included the installation of an outlet valve that allowed water to be released from the lake into Houston Creek, the removal of 30,000 cubic yards of sediment and vegetation from the lake, and the installation of a 40-foot buttress of rock riprap on the downstream side of the dam.

Field Survey

During the field survey BCR Consulting personnel carefully inspected the project site and identified the historic-period constituents. A site description is included below for the historic-period lake/reservoir and the required DPR 523 forms are included in Appendix B.

Lake Gregory (MBI2304-H-1) Site Description. This resource consists of an approximately 105-acre reservoir constructed in 1938. From east to west the reservoir is approximately 3,258 feet wide and 2,749 feet from north to south. In the reservoir's northern extent lies the dam which was replaced in 2019. An estimated 30,000 cubic yards of material was removed from the downstream side of the dam to allow the installation of an outlet value that allows water to be released from the lake into Houston Creek. Additionally, a 40-foot buttress of riprap was installed on the downstream side. On the eastern extent of the reservoir is a concrete retaining wall that is approximately 385 feet long. Three roads follow the perimeter of the reservoir, Lake Gregory Drive to the west, San Moritz Drive to the south and east, and Lake Drive to the east and North.

SIGNIFICANCE EVALUATIONS

During the field survey and research, Lake Gregory (temporarily designated MBI2304-H-1) was identified. CEQA (PRC Chapter 2.6, Section 21083.2 and CCR Title 145, Chapter 3, Article 5, Section 15064.5) and Section 106 of the NHPA calls for the evaluation and recordation of historic and archaeological resources/properties. The criteria for determining the significance of impacts to cultural resources/properties are based on Section 15064.5 of the *CEQA Guidelines* and Guidelines for the Nomination of Properties to the California Register and 36 C.F.R. § 60.4 of the NHPA. Properties eligible for listing in the National Register and the California Register and subject to review under Section 106 of the NHPA or CEQA are those meeting the criteria for listing in the California Register, National Register, or designation under a local ordinance.

Significance Criteria

National Register of Historic Places. Eligibility for the National Register rests on two factors: significance and integrity. In order to be eligible for inclusion in the National Register, a property must meet one or more of the significance criteria listed below (36 C.F.R. § 60.4) and retain integrity:

- Criterion A—Association with “events that have made a significant contribution to the broad patterns of our history.”
- Criterion B—Association with “the lives of persons significant in our past.”
- Criterion C—Resources “that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.”
- Criterion D—Resources “that have yielded, or may be likely to yield, information important to history or prehistory.”

Historically, most—but not all—archaeological resources were only evaluated under Criterion D. However, this approach is considered somewhat limited and all applicable criteria should be thoroughly considered and documented. The National Register bulletin entitled *How to Apply the National Register Criteria for Evaluation* states that in order for a property to qualify for listing in the National Register, it must meet at least one of the National Register criteria by: (1) being associated with an important historic context, and (2) retaining historic integrity of those features necessary to convey its significance (National Park Service 1997). The historic context of a resource will define the theme(s), geographical limits, and period of significance by which to evaluate a resource’s significance (National Park Service 1997:7). Generally, cultural properties must be 50 years of age or more to be eligible for listing in the National Register. According to the National Park Service (1997:2), “properties that have achieved significance within the past 50 years shall not be considered eligible” unless such properties are “of exceptional importance.”

In addition to being significant under one or more of these criteria, National Register eligibility (as well as California Register eligibility, as described below) requires that a resource retain sufficient integrity to convey its significance. Integrity is evaluated through

consideration of characteristics that existed during a resource's period of significance. Integrity is evaluated with regard to the retention of seven elements:

- Location—The place where the resource was constructed
- Design—The combination of elements that create the form, plans, space, structure, and style of the resource
- Setting—The physical environment of the resource, including the landscape and spatial relationship of the buildings
- Materials—The physical elements that were combined or deposited during a particular period of time and in a particular pattern of configuration to form the resource
- Workmanship—The physical evidence of the crafts of a particular culture or people during any given period of history
- Feeling—The resource's expression of the aesthetic or historic sense of a particular period of time
- Association—The direct link between an important historic event or person and a resource

California Register of Historical Resources. The California Register criteria are based on National Register criteria. For a property to be eligible for inclusion on the California Register, one or more of the following criteria must be met:

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.;
2. It is associated with the lives of persons important to local, California, or U.S. history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of a master, possesses high artistic values; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

Lake Greagory Significance Evaluation

Criterion A/1: Lake Gregory (MBI2304-H-1) is recommended eligible for the California Register under Criterion 1 and the National Register under Criterion A. The resource was funded by the New Deal Public Works Administration. Its funding and construction represent a connection with important programs aimed at recovery and growth during the Great Depression. For these reasons, it is significantly associated with events that have made an important contribution to the broad patterns of our history and is eligible for listing to the National Register and the California Register under Criterion A.

Criterion B/2: Lake Gregory is named after Arthur Gregory who was a prominent businessman in the fruit industry of Redlands and surrounding areas. However, Mr. Gregory's importance and influence derived from his activities in the fruit industry and are not closely linked with this resource. Engineers for the Lake Gregory Reservoir were R.B Ward and W.P. Rowe. Substantial research did not reveal any other projects that either individual had developed. Lake Gregory is therefore not associated with with important individuals and as such is not eligible for the National Register under Criterion B and is not eligible for the California Register under Criterion 2.

Criterion C/3: Lake Gregory Reservoir (MBI2304-H-1) is recommended not eligible for the for the National Register under Criterion C and not eligible for the California Register under Criterion 3. The dam's construction consists of an earth face and a concrete lined outlet tunnel and spillway. These were common features of reservoirs for generations and do not represent unique or innovative designs. It therefore does not embody distinctive characteristics of a type, period, or method of construction. Furthermore, it does not represent the work of a master or possess high artistic value.

Criterion D/4: The subject property has not and is not likely to yield information important in prehistory or history and is therefore not eligible for listing under Criterion D of the National Register or under Criterion 4 of the California Register.

The historic-age reservoir is recommended eligible for listing under Criterion A of the National Register and Criterion 1 of the California Register, and as such is recommended a "historic property" under Section 106 of the NHPA and is recommended a "historical resource" under CEQA.

Integrity. Eligible resources must retain integrity sufficient to convey that eligibility and to qualify as significant resources under CEQA and the NHPA. Integrity is measured by the degree to which a resource retains its historic location, design, setting, materials, workmanship, feeling, and/or association. The property has not been moved and thus retains integrity of location.

Documentary evidence indicates that there had not been any significant modifications to the lake or dam itself until the major rehabilitation project that the dam underwent in 2019. However, the work that was completed has not visibly changed the dam from the point of view of the lake itself and can only be seen from downstream. Therefore, the property retains integrity of design, materials, and workmanship. The area surrounding the lake has retained the same general appearance since the 1950's. Therefore, the property retains integrity of setting. Although the 2019 installations diminished some sense of the period in which the dam was constructed, the changes are minimally visible and the resource's integrity of feeling are only moderately diminished. The physical features that characterized the structure in 1938 are sufficiently intact to convey its historic character as a water structure funded by the WPA during the later years of the period New Deal. It therefore retains integrity of association. The Lake Gregory Reservoir retains sufficient integrity to convey its identity as a water structure funded by and constructed by the Works Progress Administration in 1938.

RECOMMENDATIONS

BCR Consulting conducted an intensive Cultural Resources Assessment and Historical Evaluation of Lake Gregory in Unincorporated Crestline, San Bernardino County, California. The research and field survey identified the lake itself within the project site boundaries. BCR Consulting recommends that this resource meets eligibility criteria for the National Register and for the California Register. As such it is recommended a historic property under Section 106 of the NHPA and is recommended a historical resource under CEQA. However, proposed project activities will not result in significant adverse effects to any character-defining features. Furthermore, disturbances associated with the construction of the lake at the subject property have been severe and have disrupted soil beyond depths at which buried cultural resources are likely. Also, no buried discoveries have occurred in the vicinity of the project site. As a result, the potential to encounter in-situ remains associated with significant archaeological materials during project-related excavation is low. Based on these results no further cultural resource work or mitigations are recommended.

While the current study has not indicated sensitivity for unknown cultural resources within the project boundaries, ground disturbing activities always have the potential to reveal buried deposits not observed on the surface during previous surveys. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks.

Findings were positive during the Sacred Lands File search with the NAHC. The results of the Sacred Lands File search are provided in Appendix D. The State Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information

available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Since the County of San Bernardino will initiate and carry out the required AB52 Native American Consultation, the results of the consultation are not provided in this report. However, this report may be used during the consultation process, and BCR Consulting staff is available to answer questions and address concerns as necessary.

According to CEQA Guidelines, projects subject to CEQA must determine whether the project would "directly or indirectly destroy a unique paleontological resource". The Paleontological Overview provided in Appendix E has recommended that:

> The geologic units underlying the project area area mapped primarily as Holocene aged alluvial gravel and sand surrounding the lake's perimeter, which is then surrounded by Cretaceous aged quartz monzonite, granodiorite, etc (Dibblee and Minch 2004). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. Cretaceous units like the one described are not considered to be paleontologically sensitive. The Western Science Center does not have localities within the project area or within a 1 mile radius.
>
> While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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APPENDIX A

RECORDS SEARCH BIBLIOGRAPHY

Report List

MBI2304

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-02845	NADB-R - 1062845	1994	LERCH, MICHAEL	CULTURAL RESOURCES ASSESSMENT OF EFFLUENT HOLDING PONDS, CRESTLINE SANITATION DISTRICT, SAN BERNARDINO COUNTY, CA	TOM DODSON & ASSOCIATES	
SB-03039	NADB-R - 1063039	1995	GRAY, DEBORAH and DONN R. GRENDA	ARCHAEOLOGICAL SURVEY OF AN 8.4 ACRE PARCEL FOR THE RIM OF THE WORLD UNIFIED SCHOOL DISTRICT, SAN BERNARDINO COUNTY, CA	STATISTICAL RESEARCH	
SB-04242	NADB-R - 1064242	2004	MIRRO, MICHAEL	CULTURAL RESOURCES SURVEY OF 245 ACRES ON THE THOUSAND PINES PROPERTY FOR THE NATIONAL RESOURCES CONSERVATION SERVICE. 5PP	APPLIED EARTHWORKS	36-020287
SB-04967	NADB-R - 1064967; NRCS -	2005	Mirro, Michael	Cultural Resources Survey of Approximately 97 Acres within th Crestline Sanitation Property for the Natural Resources Conservation Service.	Applied Earthworks	
SB-04969	NADB-R - 1064969; NRCS -	2006	Mirro, Michael	Cultural Resources Survey of 102.2 Acres Within the CF183ULP Project Area for the Natural Resources Conservation Service.	Applied Earthworks	36-012705, 36-012706, 36-012707, 36-012708
SB-05016	NADB-R - 1065016	2006	Mirro, Michael	Cultural Resources Survey of San Bernardino County Road Segments of Lake Arrowhead and Lake Gregory, California.		
SB-05020	NADB-R - 1065020	2006	Mirro, Michael	Cultural Resources Survey of Approximately 51 Acres within the Urban Large Parcel CF 188 Project Area for the Natural Resources Conservation Service.		
SB-05447	NADB-R - 1065447	2007	Mirro, Michael	Cultural Resources Survey of 148 Parcels Encompassing 175.7 Acres within the Urban Large Parcel CF214 Project Area for the Natural Resources Conservation Service.	Applied Earthworks	36-013426
SB-05451	NADB-R - 1065451; NRCS -	2007	Mirro, Michael	Cultural Resources Survey of 399 Parcels Encompassing 155.21 Acres within the Urban Large Parcel CF 208 Project Area for the Natural Resources Conservation Service.	Applied Earthworks	36-013434, 36-013435, 36-013436, 36-013437, 36-013438
SB-05895	NADB-R - 1065895	2007	Mirro, Michael	Cultural Resources Survey of Approximately 116.5 Acres in the North Road Fuel Modification Project Area for the Natural Resources Conservation Service.		

Report List

MBI2304

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SB-06048	NADB-R - 1066048; NRCS -	2008	Mirro, Michael	Cultural Resources Survey of 60.6 Acres on the Dart Canyon Fuel Modification Project Area for the Natural Resources Conservation Service.	Applied Earthworks	
SB-06644	CAL FIRE - ; NADB-R - 1066644	2008	Kessler, John	Confidential Archaeological Letter for the Great View Fuel Modification Project, San Bernardino County, California.	Black Fox Timber Management Group	
SB-06761	NADB-R - 1066761	2005	Gardner, Jill K., Audry Williams, and Hubert Switalski	A Heritage Resources Inventory for the Hazard Tree Removal Project in the Mountain Top and Front Country Districts of the San Bernardino National Forest on Behalf of Southern California Edison Company.		36-000930, 36-003802, 36-004291, 36-004293, 36-004887, 36-005580, 36-010265, 36-010266, 36-012137, 36-012138, 36-012139, 36-012140, 36-012141, 36-012142, 36-012143, 36-012144, 36-012145, 36-012261, 36-020554
SB-06995	NADB-R - 1066995	2010	Losekoot, Frank	A Confidential Archaeological Letter for the Houston Fuel Modification Project for the County of San Bernardino Hazardous Tree Removal Operations, San Bernardino County, California.	San Bernardino County/CDF	
SB-07640	NADB-R - 1067640	2011	Losekoot, Frank	A Confidential Letter for the Lake Gregory Fuel Modification Project for the County of San Bernardino, San Bernardino County, California.		
SB-08091		2014	Brodie, Natalie	ARCHAEOLOGICAL SURVEY REPORT FOR THE SOUTHERN CALIFORNIA EDISON COMPANY REPLACEMENT OF FIVE DETERIORATED POWER POLES ON THE PENSTOCK 12kV CIRCUIT (TD841039), TAGGERT 12kv CIRCUIT (TD837440), MONTREAL 12kV CIRCUIT (TD842772), AND CRESTLINE 2.4kV CIRCUIT (TD843211), SAN BERNARDINO NATIONAL FOREST, SAN BERNARDINO COUNTY, CALIFORNIA	LSA Associates, Inc.	

Resource List

MBI2304

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-36-012789		Resource Name - AE-CF188-2H	Site	Historic	AH02; AH05	2006 (M. Linder, Applied Earthworks)	
P-36-013426		AE-CF214-1H; 24655 San Moritz Dr, Crestline			AH02; AH11	2007 (Applied Earthworks)	SB-05447
P-36-013429		Resource Name - AE-CPP184-1H	Site	Historic	AH02; AH11	2006 (M. Linder, Applied EarthWorks, Inc.)	SB-05450
P-36-020287		Resource Name - AE-TP-1; Resource Name - Thousand Pines Camp	Site	Historic	AH04; AH15	2004 (B. Sheets, Applied Earthworks)	SB-04242
P-36-024767		Resource Name - San Moritz Way Alignment	Site	Historic	AH07; HP37	2011 (Joshu Trampier, SRI)	
P-36-026759							

APPENDIX B

DEPARTMENT OF PARK AND RECREATION 523 FORMS

P1. Other Identifier: Lake Gregory

***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** San Bernardino

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** San Bernardino North **Date:** 1988 **T**2N; **R**4W; 23**;** SBBM

c. Address: City: Crestline Zip: 92410

d. UTM: Zone: 11S 474571 mE/ 3789007 mN (G.P.S.; NAD83) Elevation: 4500' AMSL

e. Other Locational Data: The subject property is located on the northwest corner of the intersection of Lake Gregory Drive and San Moritz Drive.

***P3a. Description:** This resource consists of an approximately 105-acre reservoir constructed in 1938 (See Page 2, 3, and 4 for construction history). From east to west the reservoir is approximately 3,258 feet wide and 2,749 feet from north to south. In the reservoir's northern extent lies the dam which underwent a large rehabilitation project in 2019. An estimated 30,000 cubic yards of material was removed from the downstream side of the dam to allow the installation of an outlet value that allows water to be released from the lake into Houston Creek. Additionally, a 40-foot buttress of riprap was installed on the downstream side. On the eastern extent of the reservoir is a concrete retaining wall that is approximately 385 feet long. Three roads follow the perimeter of the reservoir, Lake Gregory Drive to the west, San Moritz Drive to the south and east, and Lake Drive to the east and North.

***P3b. Resource Attributes:** HP22. Lake/River/Reservoir

P5a. Photo or Drawing **(**Photo required for buildings, structures, and objects.)

***P4. Resources Present:** ☐Building ☑Structure ☐Object ☐Site ☐District ☐Element of District ☐Other

P5b. Description of Photo: (View, date, accession #) Lake Overview (View West), 12/1/2023

***P6. Date Constructed/ Age and Sources:** ☑Historic 1938 (see page 2) ☐Prehistoric ☐Both

***P7. Owner and Address:** County of San Bernardino 385 N Arrowhead Ave San Bernardino, CA 92415

***P8. Recorded by:** J. Defachelle, K. Heskett BCR Consulting LLC Claremont, California 91711

***P9. Date Recorded:** 11/30/23 and 12/1/23

***P10. Survey Type:** Intensive.

***P11. Report Citation:** *Cultural Resources Assessment and Historical Evaluation Lake Gregory Regional Park Sitewide Sediment Management Project, Crestline, San Bernardino County, California*

***Attachments:** ☐None ☐Location Map ☑Sketch Map ☑Continuation Sheet ☑Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

B1. Historic Name: N/A B2. Common Name: Lake Gregory
B3. Original Use: Water Reservoir, Recreation B4. Present Use: Water Reservoir, Recreation
***B5. Architectural Style:**
***B6. Construction History:** (Construction date, alterations): See Property History on Continuation Sheet Page 3.

***B7. Moved?** ☑**No** ☐**Yes** ☐**Unknown** **Date:** N/A **Original Location:** N/A ***B8. Related Features:** None
B9a. Architect: W.P. Rowe and R.V. Ward b. Builder: Ralph Smith
***B10. Significance: Theme:** Public Works Administration Project **Area:** Crestline **Applicable Criteria:** N/A

History

The site that Lake Gregory occupies was originally called Houston Flat. The lake was named after Arthur Gregory who was an accomplished businessman from Redlands (The San Bernardino County Sun, 17 September 1937:4). Mr. Gregory began his career as a farm hand, and he slowly acquired and developed an operation of approximately 40 fruit packing houses and hundreds of acres of fruit orchards and cattle ranches (Whitney 1938). Gregory would eventually purchase 1,500 acres of land in the Crest Forest to source timber for crates to ship his fruit (Whitney 1938). Gregory's land and other land in the area owned by Bessie Cathcart of San Bernardino, would later be donated as site for Lake Gregory. During the summer of 1935, Gregory saw the need and value in creating the lake as a water supply and for public recreation at the Houston Flat location (The San Bernardino County Sun, 17 September 1937: 4). This would lead him to form a committee in December of 1935 consisting of local residents to petition for the creation of a water district so that funds could be raised for the project (The San Bernardino County Sun 1937, 17 September: 4). By January of 1936, an official charter was issued by the secretary of state in Sacramento, legally recognizing the Crest Forest County Water District (The San Bernardino County Sun 1937, 17 September: 4). On March 3, 1936, an election was held to elect a board of directors to govern the new district. Members selected included Arthur Gregory, Frederick Spencer, Noble Whittemore, Bessie Cathcart, and Art Manning (The San Bernardino County Sun 1937, 17 September: 4). The first action that the board of supervisors would take was to file an application with the Works Progress Administration (WPA) for government assistance in creation of the lake and dam. The total cost for the construction of the lake and dam would total 225,000 dollars and the WPA approved and allocated approximately 178,000 dollars for the project, the rest of the funds would be put forward by the newly formed Crest Forest County Water District (Robinson 1989; The San Bernardino County Sun 1937, 17 September:5).

Establishment of Depression-era Federal Programs. When Franklin Delano Roosevelt took office in 1932, his primary focus was mitigation of the economic devastation of the Great Depression by every means at his disposal. His administration launched a flurry of programs aimed at economic stabilization and putting the 13 million unemployed Americans back to work beginning with the National Industrial Recovery Act of 1933 (NIRA). Hugh S. Johnson, a retired World War I general, was put in charge of its implementation through the National Recovery Administration (NRA). Johnson's agency attempted to develop a planned economy through agreements with businesses to pay minimum wages, limit working hours, and prevent child labor. The NRA also tried to impose price controls and encouraged American consumers to boycott businesses that did not sign on and publicly display support for its program (Taylor 2007).

[Public Works Administration and Property History continued on page 3].

Period of Significance: Pre-World War II **Property Type:** Municipal

Applicable Criteria: N/A B11. Additional Resource Attributes N/A
***B12. References:**

Lee, Bradford A. 1982. *The New Deal Reconsidered.* Electronic Document: https://www.jstor.org/stable/40256265. Accessed multiple dates.
Leighninger, Robert D. Jr. 2007. *Long-range Public Investment: the Forgotten Legacy of the New Deal.* University of South Carolina Press, Columbia, South Carolina.
The Los Angeles Times 1938 *New Mountain Lake Created,* July 24: 4.
The Mountaineer 1937 *Gregory Lake Board Urges Support To Finance New Lake For Crest Area,* August 20: 1.
The Mountaineer 1937 *Lake Gregory Dream About To Be Realized,* September 17: 2.
The Mountaineer 1938 *Lake Gregory Forming As Water Impounded By Dam,* January 28: 1.
The San Bernardino County Sun 1937 *King Reviews History of Dam Project,* September 17: 1.
The San Bernardino County Sun 1937 *Attorney Reviews History of Gregory Dam Project,* September 17: 2.
San Bernardino County 2019 "Construction on the Lake Gregory Dam is Complete!". Electronic document, accessed June 14, 2023.
Griffin Structures 2019 "Lake Gregory Dam Rehabilitation". Electronic document, accessed June 14, 2023.
Short, C. W. & R. Stanley-Brown. 1939. *Public Buildings: a Survey of Architecture of Projects Constructed by Federal and Other Governmental Bodies between the Years 1933 and 1939 with the Assistance of the Public Works Administration.* Government Printing Office, Washington.
The Living New Deal. 2016. *Public Works Administration (PWA), 1933-1943.* Electronic Document: https://livingnewdeal.org/glossary/public-works-administration-pwa-1933-1943. Accessed Feb. 10, 2023.
Victor Valley News-Herald 1937 *Work Progressing At Lake Gregory,* 20 August: 1.
Whitney, Allan F. 1938. *Golden Jubilee: Redlands California 1888-1938.* Citrograph Printing Co, Redlands, California.

***B14. Evaluators:** Timothy Blood and David Brunzell, BCR Consulting, Claremont, California

***Date of Evaluation** 12/4/2023

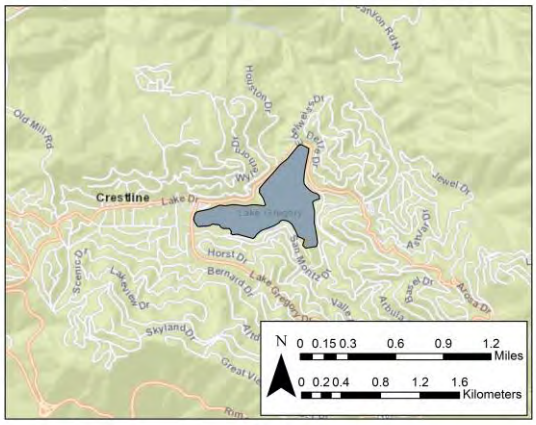
B10. Significance [Continued from page 2]:
The economic controls of the NRA were intended to work in concert with a comprehensive nationwide public works program that was established as Title 2 of the NRA. Known as the Public Works Administration (PWA), it was initially given $3.3 billion to fund infrastructure projects. It was a stimulus rather than an unemployment program; the PWA provided loans and grants to state and local governments. These non-federal agencies developed projects, chose contractors, and typically shared project costs. PWA projects hired local workers but did not require that they be currently unemployed (The Living New Deal 2016). By the end of 1933, the PWA had funded nearly 20,000 projects, about one fifth of which were state or local (Leighninger 2007). In 1935, the US Supreme Court ruled the NRA unconstitutional, but the PWA survived and was able to continue its work. Many other programs were established to combat unemployment and put the US economy back on course. The Civilian Conservation Corps put unemployed men to work on public lands beginning in 1933. In 1935, the Second New Deal began establishing additional programs, most notably the Works Progress Administration (WPA), which was the largest and is today the most widely remembered of the federal measures taken to combat the Great Depression. The WPA was a direct employment program: it hired unemployed Americans to work on an extremely diverse array of infrastructure and arts projects over its eight years of existence.

PWA Legacy in California. By the end of 1938, the PWA had funded nearly 26,000 projects throughout the US, about 40 percent of which were non-federal. Public housing, schools, prisons, state capitols, post offices, and all types of infrastructure were through the PWA. 2,200 of the buildings constructed by the program were part of larger power, sewer, or water supply infrastructure projects. The most ambitious and largest in scope of its projects were the great dams of the 1930s; some of the most famous bridges of the era were also PWA-funded. The inception of the PWA coincided with the passage of the Field Act in California, which banned construction of unreinforced masonry and set seismic resistance standards after the 1933 Long Beach earthquake. At the end of the decade, a PWA book summing up the achievements and challenges of the program credited California architects working on PWA projects with having evolved what amounted to a new architectural design movement. California craftsman developed the use of gunite in construction as well as achieving the highest aesthetic standards for concrete finish, and many of the aesthetically outstanding buildings of the program were in California. California designers were credited by PWA administrators with improving the visual appeal of sewage and water supply buildings, specifically noting that advances in the use of concrete as a finishing material had allowed utilitarian buildings to "become structures of great aesthetic merit." California projects completed under the PWA include architectural landmarks such as the Golden Gate Bridge, Chaffey Junior College library in Ontario, and Alameda County Courthouse as well as post offices, city halls, and dozens of school buildings. Infrastructure projects are less famous but equally important and include sewage treatment plants in Laguna Beach, Newport, and El Monte as well as reinforced concrete water reservoirs in Whittier and Sacramento (Short & Brown 1939).

Subject Property Development History

Work on Lake Gregory began soon after WPA funded the project in October 1936 (The Mountaineer, 23 October 1936:1). Changes in WPA allotment rules almost stopped the project by causing a shortage in funds of 20,000 dollars. Fortunately, the money funded from donations raised by the Crest Forest County Water District (The Mountaineer, 20 August 1937:1). By August 1937, work had begun removing trees and brush from the bed of the lake. A force of 150 men began work at the project and this would eventually increase to 250 men (Victor Valley News-Herald, 20 August 1937:1). The project was designed by engineers W.P. Rowe and R.B. Ward and the WPA labor force was managed by WPA District Manager Ralph Smith (The San Bernardino County Sun, 17 September 1937:5). The construction of the lake and dam took approximately fourteen months and was finished in January of 1938 (The Mountaineer, 28 January 1938: 1). The dam was constructed of rock and earth and stood 75 feet high (Robinson 1989). It was estimated that it would take a year to fill the lake but a record setting amount of rainfall from late February to early March of 1938 filled the 95-acre lake in a matter of three days (The Los Angeles Times, 24 July 1938:4; Robinson 1989). The lake retained its original configuration until 2019 when the dam was deemed hazardous by the California Division of Safety of Dams because it did not meet seismic safety standards (San Bernardino County 2019). The dam went under a retrofit which included the installation of an outlet valve that allowed water to be released from the lake into Houston Creek, the removal of 30,000 cubic yards of sediment and vegetation from the lake, and the installation of a 40-foot buttress of rock riprap on the downstream side of the dam (Griffin Structures 2019).

(Sketch Map with north arrow required.)



National Register/California Register Evaluations

Criterion A/1: Lake Gregory (MBI2304-H-1) is recommended eligible for the California Register under Criterion 1 and the National

Register under Criterion A. The resource was funded by the New Deal Public Works Administration. Its funding and construction represents a connection with important programs aimed at recovery and growth during the Great Depression. For these reasons, it is significantly associated with events that have made an important contribution to the broad patterns of our history and is eligible for listing to the National Register and the California Register under Criterion A.

Criterion B/2: Lake Gregory is named after Arthur Gregory who was a prominent businessman in the fruit industry of Redlands and surrounding areas. However, Mr. Gregory's importance and influence derived from his activities in the fruit industry and is not closely linked with this resource. Engineers for the Lake Gregory Reservoir were R.B Ward and W.P. Rowe. Substantial research did not reveal any other projects that either individual had worked on. Lake Gregory is therefore not eligible for the National Register under Criterion B and is not eligible for the California Register under Criterion 2.

Criterion C/3: Lake Gregory Reservoir (MBI2304-H-1) is recommended not eligible for the for the National Register under Criterion C and not eligible for the California Register under Criterion 3. The dam's construction consists of an earth face and a concrete lined outlet tunnel and spillway. These were common features of reservoirs for generations and do not represent unique or innovative designs. It therefore does not embody distinctive characteristics of a type, period, or method of construction. Furthermore, it does not represent the work of a master or possess high artistic value.

Criterion D/4: The subject property has not and is not likely to yield information important in prehistory or history and is therefore not eligible for listing under Criterion D of the National Register or under Criterion 4 of the California Register.

The historic-age reservoir is recommended eligible for listing under Criterion A of the National Register Criterion 1 of the California Register, and, as such is recommended a "historic property" under NHPA and is recommended a "historical resource" under CEQA.

Integrity. Eligible resources must retain integrity sufficient to convey that eligibility and to qualify as significant resources under CEQA and the NHPA. Integrity is measured by the degree to which a resource retains its historic location, design, setting, materials, workmanship, feeling, and/or association. The property has not been moved and thus retains integrity of location.

Research has revealed historic photographs of the property from the time of its construction and documentary evidence indicates that there had not been any significant modifications to the lake or dam itself until the major rehabilitation project that the dam underwent in 2019. However, the work that was completed has not visibly changed the dam from the point of view of the lake itself and can only be seen from downstream. Therefore, the property retains integrity of design, materials, and workmanship. The area surrounding the lake has retained the same general appearance since the 1950's. Therefore, the property retains integrity of setting. Although the 2019 installations diminished some sense of the period in which the dam was constructed, the changes are minimally visible and the resource's integrity of feeling are only moderately diminished. The physical features that characterized the structure in 1938 are sufficiently intact to convey its historic character as a water structure funded by the WPA during the later years of the period New Deal. It therefore retains integrity of association. The Lake Gregory Reservoir retains sufficient integrity to convey its identity as a water structure funded by and constructed by the Works Progress Administration in 1938.

Photo 1: Reservoir Overview (View NE)

Photo 2: Reservoir Overview (View S)

Photo 3: Reservoir Overview (View W)

Photo 4: Reservoir Overview (View W)

Photo 5: Retainer Wall Overview (View SW)

Photo 6: Dam Overview (View NE) Source: San Bernardino County (2019).

APPENDIX C

PHOTOGRAPHS

Photo 1: Lake Overview

Photo 2: Lake Overview with Cement Retaining Wall

Photo 3: Lake Overview

Photo 4: Lake Overview

Photo 5: Lake Overview

Photo 6: Lake Overview

APPENDIX D

NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

NATIVE AMERICAN HERITAGE COMMISSION

ACTING CHAIRPERSON
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Chumash

SECRETARY
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Vacant

COMMISSIONER
Vacant

COMMISSIONER
Vacant

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 17, 2023

David Brunzell
BCR Consulting LLC

Via Email to: bcrllc2008@gmail.com

Re: Lake Gregory Regional Park Sitewide Sediment Management Project (MBI2304), San Bernardino County

Dear Mr. Brunzell:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Tribes on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment

APPENDIX E

PALEONTOLOGICAL RESOURCES OVERVIEW

WESTERN SCIENCE CENTER

July 13th, 2023

BCR Consulting, LLC
Timothy Blood
505 W. 8th St.
Claremont, CA 91711

Dear Mr. Blood,

This letter presents the results of a record search conducted for the Lake Gregory Regional Park Sitewide Sediment Management Project in the census-designated place of Crestline, San Bernardino County, CA. The project site is located in Lake Gregory on Township 2 North, Range 4 West, Section 23 of *San Bernardino North, CA* USGS 7.5 minute quadrangle.

The geologic units underlying the project area are mapped primarily as Holocene aged alluvial gravel and sand surrounding the lake's perimeter, which is then surrounded by Cretaceous aged quartz monzonite, monzogranite, granodiorite, etc (Dibblee and Minch 2004). Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. Cretaceous units like the one described are not considered to be paleontologically sensitive. The Western Science Center does not have localities within the project area or within a 1 mile radius.

While the presence of any fossil material is unlikely, if excavation activity disturbs deeper sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, the material would be scientifically significant. Excavation activity associated with the development of the project area is unlikely to be paleontologically sensitive, but caution during development should be observed.

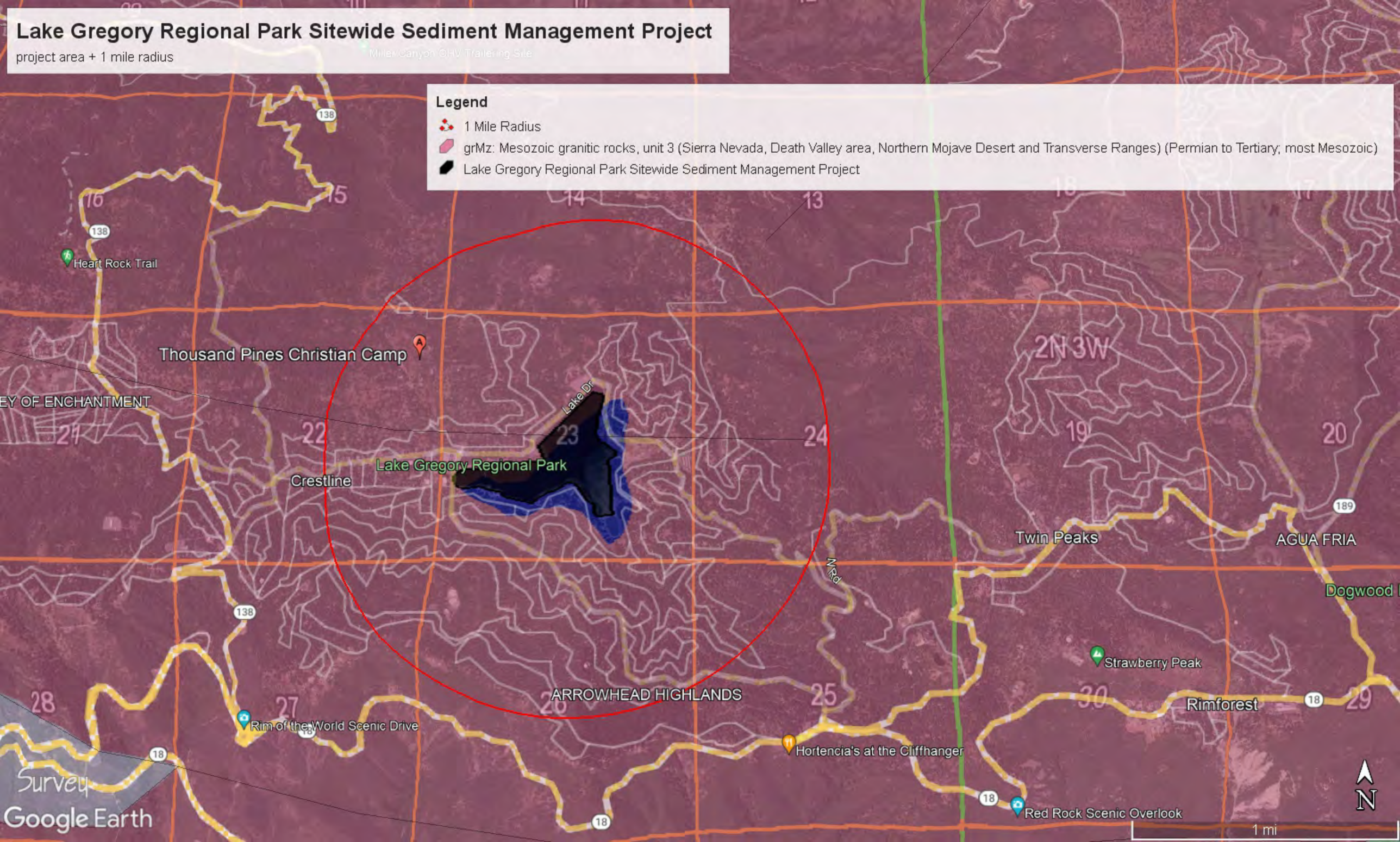
If you have any questions, or would like further information, please feel free to contact me at bstoneburg@westerncentermuseum.org.

Sincerely,

Brittney Elizabeth Stoneburg, MSc
Collections Manager

Lake Gregory Regional Park Sitewide Sediment Management Project

project area + 1 mile radius



Appendix F – Hazardous Materials Memorandum

Michael Baker INTERNATIONAL

We Make a Difference

MEMORANDUM

To: Phil Krause, Senior Project Manager, San Bernardino County, Department of Public Works, Special Districts

From: Kristen Bogue, Hazardous Materials Specialist, Michael Baker International

Date: February 12, 2024

Subject: Lake Gregory Sediment Management Project – Hazardous Materials Memorandum

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This Hazardous Materials Memorandum (Memorandum) was prepared in an effort to preliminarily identify the potential existence of hazardous materials/wastes within the boundaries of the proposed Lake Gregory Sediment Management Project located in Crestline, California, herein referenced as the Project.

METHODOLOGY

Michael Baker International's (Michael Baker's) findings, presented in this Memorandum, are limited to Michael Baker's scope of work, which included review of a regulatory database search provided by LightBox (formerly Environmental Data Resources, Inc. [EDR]). For the purposes of this Memorandum, the term "hazardous material" refers to both hazardous substances and hazardous waste. A material is defined as "hazardous" if it appears on a list of hazardous materials prepared by a Federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as "hazardous" by such an agency. A "hazardous waste" is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity).

PROJECT LOCATION AND SETTING

Lake Gregory Regional Park (the Project Site) is located at 24171 Lake Drive within the community of Crestline, in the San Bernardino National Forest of the San Bernardino Mountains; refer to Exhibit 1, *Regional Vicinity*. The lake is bounded by Lake Drive to the north and northeast, San Moritz Drive to the southeast and south, and Lake Gregory Drive to the west; refer to Exhibit 2, *Site Vicinity*. On the western shore of the lake is a u-shaped swimming beach that is the focus of the proposed beach improvements. The Lake Gregory Dam is located in the northeast section of the lake with Camp Switzerland stockpile basin to the north of the dam. The Library stockpile basin is located to the west of the swimming area.

The Project Site is a man-made 84-acre reservoir located Crestline. The lake was created with the construction of an earthen dam built in 1938 along the northeast shoreline. It has an approximate 90-acre surface area. On the western shore of the lake is a u-shaped swimming beach that is the focus of the proposed beach improvements. The lake is bounded by Lake Drive to the north and northeast, San Moritz Drive to the southeast and south, and Lake Gregory Drive to the west. The Lake Gregory Dam is located in the northeast section of the lake with Camp Switzerland and stockpile to the north of the dam. The library stockpile is located to the west of

the swimming area. The lake and surrounding shoreline are considered highly disturbed and in an urbanized setting.

REGULATORY DATABASE REVIEW

The governmental sources have been searched by LightBox (at the request of Michael Baker) for sites within the Project Site and within an approximate one-mile radius of the Project Site boundaries. Upon completion of their search, LightBox provided Michael Baker with their findings dated September 28, 2023; refer to Attachment A, Radius Map Report. Michael Baker makes no claims as to the completeness or accuracy of the referenced sources. Our review of LightBox's findings can only be as current as their listings and may not represent all known or potential hazardous waste or contaminated sites. To reduce the potential for omitting possible hazardous material sites on the Project Site and within the surrounding area, sites may be listed in this report if there is any doubt as to the location because of discrepancies in map location, zip code, address, or other information.

Project Site

The Project Site (Lake Gregory Creation Company at 24171 Lake Drive) is listed in multiple databases related to water quality permits; refer to Exhibit 3, *Regulatory Database Listing Map*. Reported activities include a silt management project in 2013 through 2015, dam rehabilitation improvements; and storm water construction activities involving stormwater quality permits. The Project Site has not been under investigation for violation of any environmental laws, regulations, or standards, as identified in the databases reported by LightBox. No reported releases of hazardous materials are noted. It is acknowledged that the placement of silt would be required to comply with existing federal, state, and local laws and regulations pertaining to the placement of fill material. It is the opinion of Michael Baker that these past on-site operations do not present a concern to soil, soil gas, and/or groundwater at this time.

Off-Site Properties

Public records identified multiple off-site listed regulatory properties within a one-mile radius of the Project Site; refer to Attachment A. The following discusses listed regulatory properties that present a concern to soil, soil gas, and/or groundwater at the Project Site, solely based on the database report (Attachment A).

Adjoining Properties

Public records identified nine (9) listed regulatory properties adjoining the Project Site (off-site properties that are contiguous to the Project Site boundaries). Of the nine properties, the following three adjoining facilities present a concern to soil, soil gas, and/or groundwater at the Project Site, solely based on the database report:

- Crestline Sanitation District Office Crestline Station (24516 Lake Drive) – This property is reported as the Crestline Sanitation District maintenance and district office facilities. This operation is reported as a small quality generator. Reported hazardous materials include the presence of waste oil and mixed oil, asbestos-containing waste, unspecified oil-containing waste, and other organic solids. Disposal methods were reported as treatment/recovery, disposal, landfill, recycler, and storage, bulking and/or transfer off-site. Reported violations appear to be administerial and these violations were reported to return to compliance. The database report also noted the presence of underground

storage tank(s) (USTs). Two USTs are reported to contain premium and diesel fuels, which were reported to release hazardous materials to the groundwater aquifer in 2004. The case received case closure on March 20, 2006 by the Regional Water Quality Control Board (RWQCB).

Although this facility has achieved case close, this site continues to operate USTs adjoining the Project Site. As such, it is the opinion of Michael Baker that this facility remains a concern to soil, soil gas, and groundwater underlying the Project Site.

- Bills ARCO (24157 Lake Drive) – This property is anticipated to have historically operated as a gasoline service station from 1972 through 1985. No other databases were reported. Given this property adjoins the northern portion of the lake, it is the opinion of Michael Baker that this facility presents a concern to soil, soil gas, and groundwater underlying the Project Site.

- Mountain Area Regional Transit Authority and Lee's Automotive (621 Forest Shade) – This facility currently, and historically, operates as an automotive service facility (currently for fleet vehicles and historically as a retail auto service shop). Given the current fleet vehicle maintenance activities that adjoin the lake to the west, it is the opinion of Michael Baker that this facility presents a concern to soil, soil gas, and groundwater underlying the Project Site.

Adjacent Properties

Public records identified 18 listed regulatory properties adjacent to the Project Site (off-site properties that are not contiguous to the Project Site boundaries). The following discusses listed adjacent regulatory properties that present a concern to soil, soil gas, and/or groundwater at the Project Site, solely based on the database report.

- Seven-11 Store #23818 (24156 Lake Drive) – This facility, located approximately 300 feet to the north of the western portion of the lake, currently operates a gasoline service station with USTs. Based on the database report, gasoline was released to the groundwater aquifer. Although remediation and monitoring are noted, the case remains open with the RWQCB. Further secondary compliance/leak detection violations were noted; although the facility returned to compliance.

  Given the open case status, and the proximity to the lake, it is the opinion of Michael Baker that this off-site gasoline service station presents a concern to groundwater underlying the Project Site.

Unmapped Properties

According to LightBox's *ESA Report Desktop Reference*, dated 1996, some reported sites (Unmapped Properties) are unmappable as exact locations remain undefined. Listings in publicly available records, which do not have adequate address information, are not generally considered practically reviewable. For the purposes of this Memorandum, practically reviewable is defined as information provided in a manner and in a form that yields information without the need for extraordinary analysis of irrelevant data. Although the location of these sites may be unknown, the site and detail information are often available through LightBox.

Michael Baker's review of Unmapped Properties consisted of a verification that the Project Site is not listed (i.e., referenced by name or street address) and a review to identify if any of the Unmapped Properties cause a moderate to high potential to contaminate groundwater that underlies the Project Site. No Unmapped Properties are reported within the boundaries of the Project Site. Other than Crestline Sanitation District Office Crestline Station (24516 Lake Drive) discussed above, contaminated groundwater underlying the Project Site as a result of one or more of the reported off-site Unmapped Properties is considered to be low due to the groundwater flow direction, status of the site, and/or the distance from the Project Site.

FINDINGS/OPINIONS

The following are findings and opinions and are considered preliminary. Michael Baker's scope of work included research of available Federal, tribal, State, and local regulatory databases to verify if listed regulatory sites or hazardous wastes have been reported within or near the boundaries of the Project Site. Michael Baker did not conduct any work to satisfy the conditions of ASTM 1527-21 (i.e., file reviews, historical records review, site visit, interviews, etc.). Michael Baker did not review historical documentation or other available public records other than the Regulatory Database Search provided by LightBox. Based on the Radius Map Report reviewed during the preparation of this Memorandum, the following are Michael Baker's opinions, in accordance with the scope-of-services, and subject to the limitations thereof, with regard to on-site hazardous materials:

- It is the opinion of Michael Baker that the following off-site adjoining facilities present a concern to soil, soil gas, and/or groundwater underlying the Project Site:
    - Crestline Sanitation District Office Crestline Station (24516 Lake Drive)
    - Bills ARCO (24157 Lake Drive)
    - Mountain Area Regional Transit Authority and Lee's Automotive (621 Forest Shade); and
    - Seven-11 Store #23818 (24156 Lake Drive).

CEQA Considerations

The following are hazardous materials-related considerations pursuant to the California Environmental Quality Act (CEQA), Appendix G, *CEQA Threshold of Significance*:

IX(b) – Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The Project involves improvements to two debris/sedimentation basins, construction of headwalls around lake inlets, reconstruction of an ephemeral stream, improvements to the Swim Beach area, and implementation of an on-going lake maintenance program. Construction and operation of the Proposed Project would not involve hazardous materials that may result in a significant hazard to the public or to the environment. The placement of silt associated with Project buildout would be required to comply with existing federal, state, and local laws and regulations pertaining to the placement of fill material.

Maintenance of the lake entails a number of maintenance activities that are limited to the off-season, non-operational period only for health and safety reasons. While some maintenance activities are required to be conducted during the park operational season. The process of keeping

the lake aesthetically and functionally optimal consists of a number of operational and maintenance procedures. Further, no known soil contamination has been reported within the Project Site. Pursuant to the Clean Water Act Section 401 Certification (33 U.S.C. Section 1341), the Project would be required to comply with best management practices (BMPs) including the proper disposal of dredged materials. If hazardous materials are detected, the materials shall be properly disposed of in accordance with Federal and State requirements. Compliance with these O&M activities as well as existing laws and regulations would ensure impacts are less than significant.

Implementation of the Proposed Project would require a Clean Water Act Section 401 Certification from the Lahontan Regional Water Quality Control Board to ensure that the proposed Project would not violate State water quality standards. Implementation of the Project would involve notification and procurement of necessary permits and authorizations. Notification to the Lahontan RWQCB and coordination for attainment of the necessary CWA 401 Certification would ensure that the Proposed Project would not violate water quality standards or waste discharge requirements. Per the requirements of the National Pollutant Discharge Elimination System (NPDES), the Project contractor would be responsible for submitting to San Bernardino County, copies of the approved General Construction Permit, including an approved Stormwater Pollution and Prevention Plan (SWPPP). Best Management Practices (BMPs) to be implemented during Project construction activities would be outlined in the SWPPP. The NPDES General Permit requires the proper handling and discharge of harmful pollutants that could affect water quality in the area. Therefore, compliance with the NPDES General Permit would ensure that any harmful pollutants or hazardous materials contained within any excavated materials, if present, would be properly handled and disposed of to prevent unsafe exposure to construction workers.

In the event that hazardous materials are encountered in soil/water during dredging activities, off-site transport and disposal of hazardous materials may occur. Specifically, the handling, transport, and disposal of hazardous materials are regulated by the DTSC, CalEPA, Cal/OSHA, OCHCA, and NBFD. The Project construction contractor would also be subject to the requirements of the Cal/OSHA and OCHCA governing removal actions. Further, DTSC regulations would require specific hazardous materials handling methods, truck haul routes, and schedules to minimize potential exposure during hazardous materials removal actions, if any.

With adherence to the mandatory requirements of affected regulatory agencies regarding the handling, transport, and disposal of hazardous materials, and compliance with the Clean Water Act Section 401 Certification process and the NPDES General Permit requirement and Government Code Section 4216 et seq., potential handling of hazardous substances in dredged materials would result in a less than significant impact.

IX(d) – Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Based on the public records reviewed as part of this Memorandum, the Project Site is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (otherwise known as the “Cortese List”). Therefore, no impacts would result in this regard.

Conclusion

It is the opinion of Michael Baker staff that impacts pertaining to these CEQA thresholds of significance, based on the information presented in this Memorandum, would likely be less than significant or no impact. No mitigation measures are anticipated to be required. However, it is acknowledged that this determination would have to be reviewed and confirmed by the CEQA Lead Agency in accordance with CEQA.

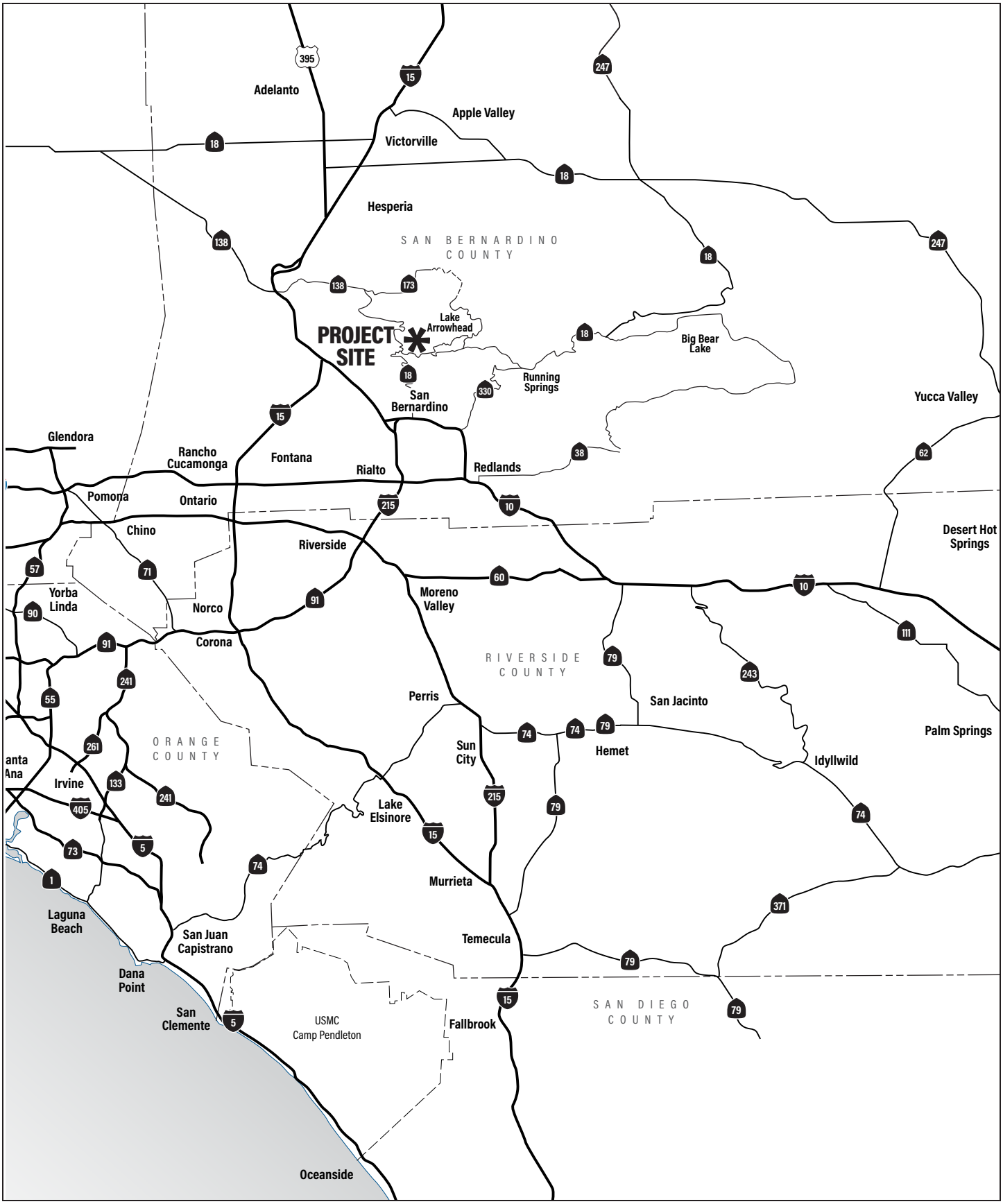
Exhibits:

1. Regional Vicinity Map
2. Site Vicinity
3. Regulatory Database Listing Map

Attachments:

A. Radius Map Report

EXHIBITS



LAKE GREGORY SEDIMENT MANAGEMENT PROJECT
HAZARDOUS MATERIALS MEMORANDUM

Regional Vicinity

Michael Baker INTERNATIONAL

NOT TO SCALE

11/2023 • JN 195651

Exhibit 1

Source: Google Earth Pro, November 2023

Michael Baker INTERNATIONAL

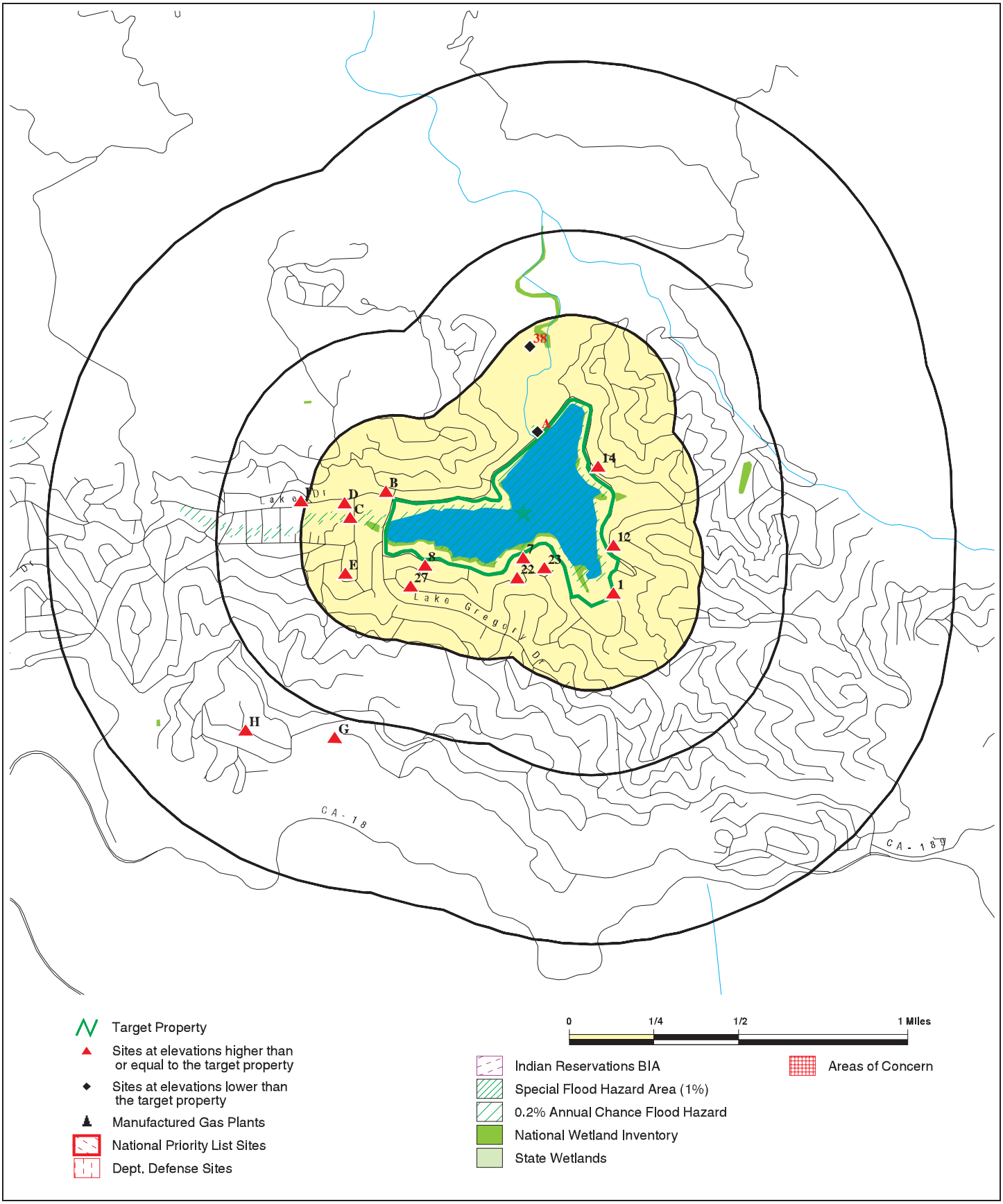
NOT TO SCALE

11/2023 • JN 195651

LAKE GREGORY SEDIMENT MANAGEMENT PROJECT
HAZARDOUS MATERIALS MEMORANDUM

Site Vicinity

Exhibit 2



Michael Baker INTERNATIONAL

NOT TO SCALE

10/2023 • JN 195651

LAKE GREGORY SEDIMENT MANAGEMENT PROJECT
HAZARDOUS MATERIALS MEMORANDUM

Regulatory Database Listing Map

Exhibit 3

ATTACHMENTS

ATTACHMENT A

Radius Map Report

Lake Gregory Sediment Mgmt
Lake Gregory Sediment Mgmt
Crestline, CA 92325

Inquiry Number: 7456999.2s
September 28, 2023

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

LAKE GREGORY SEDIMENT MGMT
CRESTLINE, CA 92325

COORDINATES

Latitude (North):	34.2428740 - 34˚ 14' 34.34''
Longitude (West):	117.2692530 - 117˚ 16' 9.31''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	475205.5
UTM Y (Meters):	3788923.5
Elevation:	4553 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12014996 SAN BERNARDINO NORTH, CA
Version Date:	2018
Northeast Map:	12014992 LAKE ARROWHEAD, CA
Version Date:	2018
Southeast Map:	12015975 HARRISON MOUNTAIN, CA
Version Date:	2018
Northwest Map:	12015000 SILVERWOOD LAKE, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200415, 20200615
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
LAKE GREGORY SEDIMENT MGMT
CRESTLINE, CA 92325

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	LAKE GREGORY LAYDOWN	24646 SAN MORTIZ DRI	RCRA NonGen / NLR	Higher	1 ft.
A2	MOUNTAIN TOP RENTALS	24517 LAKE DR	EDR Hist Auto	Higher	18, 0.003, North
A3	DI-CRESTLINE SANITAT	24516 LAKE DR	UST	Higher	18, 0.003, North
A4	DISTRICT OFFICE	24516 LAKE DRIVE	HIST UST	Higher	18, 0.003, North
A5	SAN BERN. CO, CRESTL	24516 LAKE DR	LUST, SWEEPS UST, EMI, HAZNET, San Bern. Co....	Lower	34, 0.006, North
B6	LAKE GREGORY RECREAT	24171 LAKE DR	NPDES, San Bern. Co. Permit, CIWQS	Higher	61, 0.012, West
7	ROBERT AUGUR	24469 SAN MORITZ DR	RCRA NonGen / NLR	Higher	72, 0.014, South
8	SEELEY CREEK WASTEWA	700 SKYLAND SPUR RD	San Bern. Co. Permit, CERS	Higher	73, 0.014, WSW
A9	CRESTLINE SANITATION	24516 LAKE DR	CERS HAZ WASTE, HAZNET, CERS, HWTS	Lower	82, 0.016, North
B10	GOODWIN AND SONS MAR	24089 LAKE GREGORY D	RCRA NonGen / NLR	Higher	114, 0.022, West
B11	MT COMMUNITIES RECYC	24089 LAKE GREGORY D	SWRCY	Higher	114, 0.022, West
12	CRESTLINE SANITATION	24689 SAN MORITZ WAY	CHMIRS, San Bern. Co. Permit, CERS	Higher	123, 0.023, ESE
B13	BILLS ARCO	24157 LAKE DR	EDR Hist Auto	Higher	138, 0.026, West
14	PETER MCGUAN	24680 LAKE DRIVE	RCRA NonGen / NLR	Higher	154, 0.029, ENE
B15	SEVEN-11 STORE #2381	24156 LAKE DR	UST	Higher	195, 0.037, West
B16	SEVEN-ELEVEN STORE #	24156 LAKE DR	LUST, CERS HAZ WASTE, CERS TANKS, ENF, HIST...	Higher	195, 0.037, West
B17	7-ELEVEN STORE #2381	24156 LAKE DR	LUST, Cortese	Higher	195, 0.037, West
B18	7-ELEVEN STORE #2381	24156 LAKE DRIVE	HIST UST, Notify 65	Higher	195, 0.037, West
B19	SEVEN-11 STORE #2381	24156 LAKE DR	SWEEPS UST	Higher	195, 0.037, West
B20	7-ELEVEN STORE 23818	24156 LAKE DR	RCRA NonGen / NLR	Higher	195, 0.037, West
B21	7-ELEVEN INC. #23818	24156 LAKE DR	UST	Higher	195, 0.037, West
22	TED BARTSCHERER	24458 HORST DRIVE	RCRA NonGen / NLR	Higher	226, 0.043, South
23	ELISA F. SALOMONE	24514 HORST CT	RCRA NonGen / NLR	Higher	247, 0.047, SSE
C24	MTN AREA REGIONAL TR	621 FOREST SHADE DR	CERS HAZ WASTE, San Bern. Co. Permit, CERS	Higher	415, 0.079, West
C25	MOUNTAIN AREA REGION	621 FOREST SHADE DR	RCRA NonGen / NLR	Higher	415, 0.079, West
C26	LEE'S AUTOMOTIVE	621 FOREST SHADE RD	RCRA-SQG, FINDS, ECHO	Higher	415, 0.079, West
27	KEETON SINGLE FAMILY	24200 HORST DR.	RCRA NonGen / NLR	Higher	455, 0.086, WSW
C28	STEVE'S CYLINDER HEA	638 FOREST SHADE	San Bern. Co. Permit	Higher	542, 0.103, West
C29	WALTER D BRAMSON MD	580 FOREST SHADE RD	RCRA NonGen / NLR	Higher	586, 0.111, West
D30	CRESTLINE SANITATION	536 FOREST SHADE RD	San Bern. Co. Permit, CERS	Higher	615, 0.116, West
D31	FOREST SHADE SEWAGE	536 FOREST SHADE ROA	FINDS, ECHO, PFAS ECHO	Higher	615, 0.116, West
D32	MICK HILL ENTERPRISE	24057 LAKE DR	HAZNET, San Bern. Co. Permit, HWTS	Higher	704, 0.133, West
D33	CELEBRATION CENTRE N		RCRA NonGen / NLR, PFAS ECHO	Higher	704, 0.133, West
E34	MARK CURRY	717 ROCKY LOOP	RCRA NonGen / NLR	Higher	710, 0.134, WSW
D35	EAST WEST SELF SERVE	24051 LAKE DR	UST	Higher	745, 0.141, West
D36	EAST WEST SELF SERV	24051 LAKE DRIVE	SWEEPS UST, HIST UST	Higher	745, 0.141, West
E37	MOUNTAIN DISPOSAL SE	716 ROCKY LOOP	SWEEPS UST, HIST UST, HWTS	Higher	815, 0.154, WSW
38	HUSTON CREEK WASTEWA	246 HUSTON DR	San Bern. Co. Permit, CERS	Lower	1047, 0.198, North
F39	SNYDERS TIREWORKS	23952 LAKE DR	LUST, CERS HAZ WASTE, HIST CORTESE, San Bern. Co....	Higher	1397, 0.265, West

MAPPED SITES SUMMARY

Target Property Address:
LAKE GREGORY SEDIMENT MGMT
CRESTLINE, CA 92325

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
F40	VIKING AUTO CENTER	23952 LAKE DR	LUST, Cortese	Higher	1397, 0.265, West
G41	FORWARD RELAY STATIO		UXO	Higher	2978, 0.564, SW
G42	FORWARD RELAY STATIO		FUDS	Higher	2978, 0.564, SW
H43	OPERATIONAL SITE NOR		ENVIROSTOR	Higher	3529, 0.668, SW
H44	OPERATIONAL SITE NOR		FUDS	Higher	3530, 0.669, SW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ..... National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ..... Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ..... Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-VSQG ..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List

EXECUTIVE SUMMARY

US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE..... State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST..... Underground Storage Tank Listing
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program

EXECUTIVE SUMMARY

CDL	Clandestine Drug Labs
Toxic Pits	Toxic Pits Cleanup Act Sites
US CDL	National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST	Facility Inventory Database

Local Land Records

LIENS	Environmental Liens Listing
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines

EXECUTIVE SUMMARY

FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO FIRE TRAINING	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
PFAS	PFAS Contamination Site Location Listing
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
ICE	Inspection, Compliance and Enforcement
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
HAZNET	Facility and Manifest Data
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
HAZMAT	Hazardous Material Facilities
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITES (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
CERS	CERS
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
HWTS	Hazardous Waste Tracking System
MINES MRDS	Mineral Resources Data System
PFAS TRIS	List of PFAS Added to the TRI
CHROME PLATING	Chrome Plating Facilities Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LEE'S AUTOMOTIVE EPA ID:: CAD983581331	***621 FOREST SHADE RD***	***W 0 - 1/8 (0.079 mi.)***	***C26***	***101***

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where

environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 04/24/2023 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OPERATIONAL SITE NOR Status: Inactive - Needs Evaluation Facility Id: 80001158		SW 1/2 - 1 (0.668 mi.)	H43	145

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 5 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SEVEN-ELEVEN STORE # Database: LUST, Date of Government Version: 06/05/2023 Status: Completed - Case Closed Global Id: T0607100722	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B16***	***50***
7-ELEVEN STORE #2381 Database: LUST REG 6V, Date of Government Version: 06/07/2005 Status: Post remedial action monitoring	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B17***	***80***
SNYDERS TIREWORKS Database: LUST, Date of Government Version: 06/05/2023 Status: Completed - Case Closed Global Id: T0607100689	***23952 LAKE DR***	***W 1/4 - 1/2 (0.265 mi.)***	***F39***	***132***
VIKING AUTO CENTER Database: LUST REG 6V, Date of Government Version: 06/07/2005 Close Date: 5/17/2001 Status: Case Closed	***23952 LAKE DR***	***W 1/4 - 1/2 (0.265 mi.)***	***F40***	***142***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN BERN. CO, CRESTL Database: LUST, Date of Government Version: 06/05/2023 Status: Completed - Case Closed Global Id: T0607192036	***24516 LAKE DR***	***N 0 - 1/8 (0.006 mi.)***	***A5***	***13***

EXECUTIVE SUMMARY

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DI-CRESTLINE SANITAT Database: UST, Date of Government Version: 06/05/2023 Facility Id: 87013996	24516 LAKE DR	N 0 - 1/8 (0.003 mi.)	A3	11
SEVEN-11 STORE #2381 Database: UST, Date of Government Version: 06/05/2023 Facility Id: 86008869	24156 LAKE DR	W 0 - 1/8 (0.037 mi.)	B15	49
7-ELEVEN INC. #23818 Database: UST, Date of Government Version: 06/05/2023 Facility Id: FA0006123	24156 LAKE DR	W 0 - 1/8 (0.037 mi.)	B21	87
EAST WEST SELF SERVE Database: UST, Date of Government Version: 06/05/2023 Facility Id: 86007908	24051 LAKE DR	W 1/8 - 1/4 (0.141 mi.)	D35	124

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 06/02/2023 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MT COMMUNITIES RECYC Cert Id: RC11066	24089 LAKE GREGORY D	W 0 - 1/8 (0.022 mi.)	B11	42

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 04/17/2023 has revealed that there are 3 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SEVEN-ELEVEN STORE #	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B16***	***50***
MTN AREA REGIONAL TR	***621 FOREST SHADE DR***	***W 0 - 1/8 (0.079 mi.)***	***C24***	***93***

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
CRESTLINE SANITATION	***24516 LAKE DR***	***N 0 - 1/8 (0.016 mi.)***	***A9***	***28***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SEVEN-11 STORE #2381 Status: A Tank Status: A Comp Number: 12380	24156 LAKE DR	W 0 - 1/8 (0.037 mi.)	B19	83
EAST WEST SELF SERV Status: A Tank Status: A Comp Number: 48533	***24051 LAKE DRIVE***	***W 1/8 - 1/4 (0.141 mi.)***	***D36***	***125***
MOUNTAIN DISPOSAL SE Status: A Tank Status: A Comp Number: 39040	***716 ROCKY LOOP***	***WSW 1/8 - 1/4 (0.154 mi.)***	***E37***	***127***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN BERN. CO, CRESTL Status: A Tank Status: A Comp Number: 31957	***24516 LAKE DR***	***N 0 - 1/8 (0.006 mi.)***	***A5***	***13***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 4 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DISTRICT OFFICE Facility Id: 00000031957	24516 LAKE DRIVE	N 0 - 1/8 (0.003 mi.)	A4	12
7-ELEVEN STORE #2381 Facility Id: 00000012380	***24156 LAKE DRIVE***	***W 0 - 1/8 (0.037 mi.)***	***B18***	***82***
EAST WEST SELF SERV Facility Id: 00000048533	***24051 LAKE DRIVE***	***W 1/8 - 1/4 (0.141 mi.)***	***D36***	***125***
MOUNTAIN DISPOSAL SE	***716 ROCKY LOOP***	***WSW 1/8 - 1/4 (0.154 mi.)***	***E37***	***127***

EXECUTIVE SUMMARY

Facility Id: 00000039040

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 04/17/2023 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SEVEN-ELEVEN STORE #	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B16***	***50***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 07/24/2023 has revealed that there are 12 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAKE GREGORY LAYDOWN EPA ID:: CAC003007911	24646 SAN MORTIZ DRI	0 - 1/8 (0.000 mi.)	1	9
ROBERT AUGUR EPA ID:: CAC003164689	24469 SAN MORITZ DR	S 0 - 1/8 (0.014 mi.)	7	23
GOODWIN AND SONS MAR EPA ID:: CAC003130319	24089 LAKE GREGORY D	W 0 - 1/8 (0.022 mi.)	B10	40
PETER MCGUAN EPA ID:: CAC003079155	24680 LAKE DRIVE	ENE 0 - 1/8 (0.029 mi.)	14	47
7-ELEVEN STORE 23818 EPA ID:: CAD981464969	24156 LAKE DR	W 0 - 1/8 (0.037 mi.)	B20	84
TED BARTSCHERER EPA ID:: CAC003153673	24458 HORST DRIVE	S 0 - 1/8 (0.043 mi.)	22	88
ELISA F. SALOMONE EPA ID:: CAC003107768	24514 HORST CT	SSE 0 - 1/8 (0.047 mi.)	23	91
MOUNTAIN AREA REGION EPA ID:: CAL000273939	621 FOREST SHADE DR	W 0 - 1/8 (0.079 mi.)	C25	99
KEETON SINGLE FAMILY EPA ID:: CAC002997603	24200 HORST DR.	WSW 0 - 1/8 (0.086 mi.)	27	104
WALTER D BRAMSON MD EPA ID:: CAL000436569	580 FOREST SHADE RD	W 0 - 1/8 (0.111 mi.)	C29	106
CELEBRATION CENTRE N EPA ID:: CAP000210880		***W 1/8 - 1/4 (0.133 mi.)***	***D33***	***118***
MARK CURRY	717 ROCKY LOOP	WSW 1/8 - 1/4 (0.134 mi.)	E34	122

EXECUTIVE SUMMARY

EPA ID:: CAC003184664

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 05/08/2023 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORWARD RELAY STATIO		SW 1/2 - 1 (0.564 mi.)	G42	144
OPERATIONAL SITE NOR		SW 1/2 - 1 (0.669 mi.)	H44	146

UXO: A listing of unexploded ordnance site locations

A review of the UXO list, as provided by EDR, and dated 11/09/2021 has revealed that there is 1 UXO site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORWARD RELAY STATIO		SW 1/2 - 1 (0.564 mi.)	G41	144

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 07/05/2023 has revealed that there are 2 PFAS ECHO sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FOREST SHADE SEWAGE	***536 FOREST SHADE ROA***	***W 0 - 1/8 (0.116 mi.)***	***D31***	***113***
CELEBRATION CENTRE N		***W 1/8 - 1/4 (0.133 mi.)***	***D33***	***118***

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/14/2023 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
7-ELEVEN STORE #2381	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B17***	***80***
Cleanup Status: COMPLETED - CASE CLOSED				
VIKING AUTO CENTER	***23952 LAKE DR***	***W 1/4 - 1/2 (0.265 mi.)***	***F40***	***142***
Cleanup Status: COMPLETED - CASE CLOSED				

EXECUTIVE SUMMARY

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SEVEN-ELEVEN STORE # Reg Id: 6B3600237T	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B16***	***50***
SNYDERS TIREWORKS Reg Id: 6B3600119T	***23952 LAKE DR***	***W 1/4 - 1/2 (0.265 mi.)***	***F39***	***132***

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 05/09/2023 has revealed that there are 10 San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LAKE GREGORY RECREAT Facility Status: INACTIVE Facility Id: FA0016162 Facility Id: FA0004365	***24171 LAKE DR***	***W 0 - 1/8 (0.012 mi.)***	***B6***	***21***
SEELEY CREEK WASTEWA Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0006099	***700 SKYLAND SPUR RD***	***WSW 0 - 1/8 (0.014 mi.)***	***8***	***25***
CRESTLINE SANITATION Facility Status: ACTIVE Facility Id: FA0011398	***24689 SAN MORITZ WAY***	***ESE 0 - 1/8 (0.023 mi.)***	***12***	***42***
SEVEN-ELEVEN STORE # Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0006123	***24156 LAKE DR***	***W 0 - 1/8 (0.037 mi.)***	***B16***	***50***
MTN AREA REGIONAL TR Facility Status: ACTIVE Facility Id: FA0004595	***621 FOREST SHADE DR***	***W 0 - 1/8 (0.079 mi.)***	***C24***	***93***
STEVE'S CYLINDER HEA Facility Status: INACTIVE Facility Id: FA0006467	638 FOREST SHADE	W 0 - 1/8 (0.103 mi.)	C28	106
CRESTLINE SANITATION Facility Status: ACTIVE Facility Id: FA0011397	***536 FOREST SHADE RD***	***W 0 - 1/8 (0.116 mi.)***	***D30***	***109***
MICK HILL ENTERPRISE Facility Status: INACTIVE Facility Id: FA0002844	***24057 LAKE DR***	***W 1/8 - 1/4 (0.133 mi.)***	***D32***	***115***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN BERN. CO, CRESTL	***24516 LAKE DR***	***N 0 - 1/8 (0.006 mi.)***	***A5***	***13***

Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0002717				
HUSTON CREEK WASTEWA	***246 HUSTON DR***	***N 1/8 - 1/4 (0.198 mi.)***	***38***	***129***
Facility Status: ACTIVE Facility Status: INACTIVE Facility Id: FA0003870				

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 06/06/2023 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
7-ELEVEN STORE #2381	***24156 LAKE DRIVE***	***W 0 - 1/8 (0.037 mi.)***	***B18***	***82***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

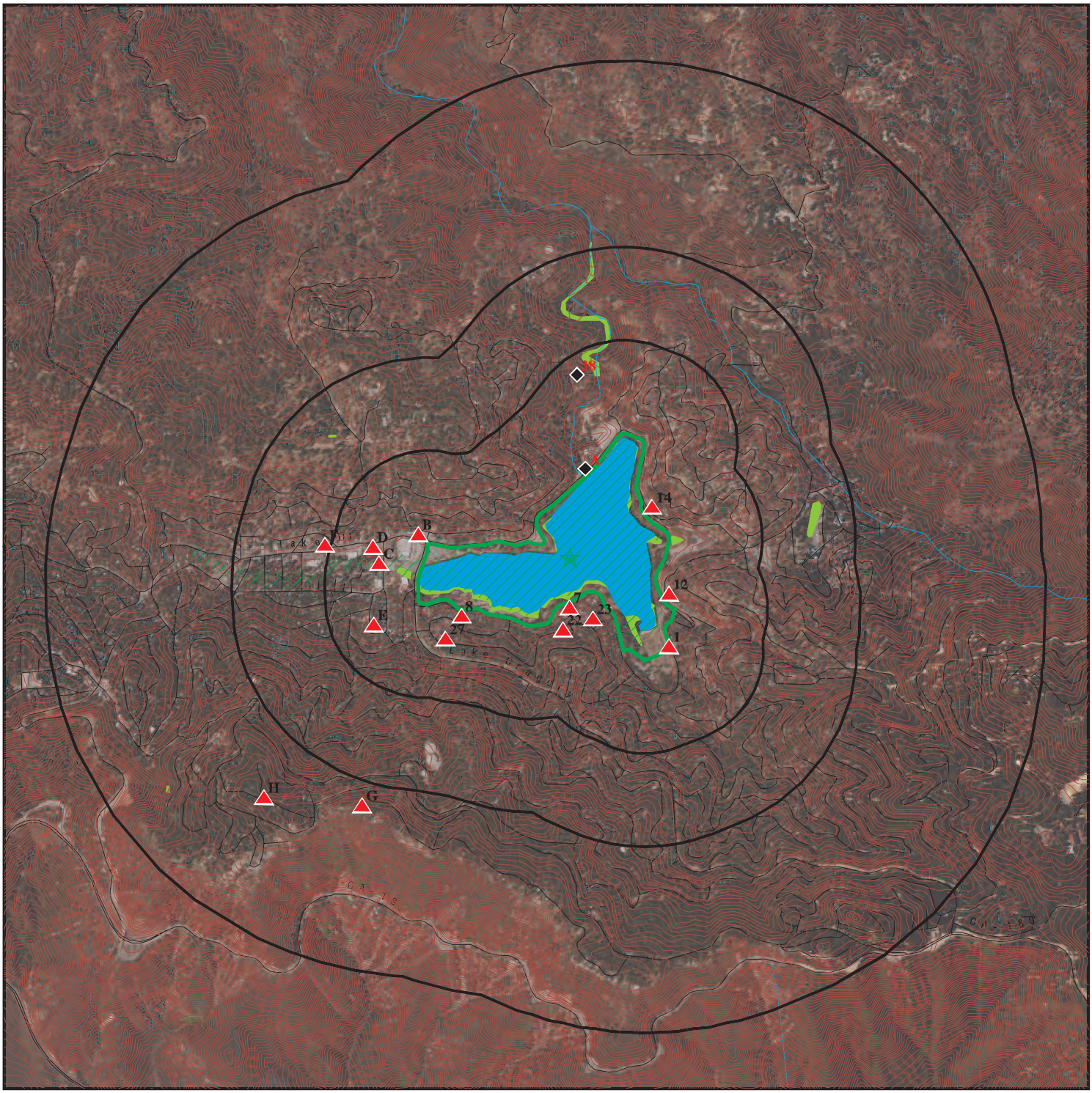
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOUNTAIN TOP RENTALS	24517 LAKE DR	N 0 - 1/8 (0.003 mi.)	A2	11
BILLS ARCO	24157 LAKE DR	W 0 - 1/8 (0.026 mi.)	B13	46

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
	CDL
CRESTLINE SANITATION DISTRICT	LUST, Cortese
VIRAMONTES EXPRESS	SWF/LF
LOS ANGELES WASTE INDUSTRIES, INC.	SWF/LF

OVERVIEW MAP - 7456999.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Lake Gregory Sediment Mgmt	CLIENT:	Michael Baker International
ADDRESS:	Lake Gregory Sediment Mgmt Crestline CA 92325	CONTACT:	Kristen Bogue
		INQUIRY #:	7456999.2s
LAT/LONG:	34.242874 / 117.269253	DATE:	September 28, 2023 12:51 pm

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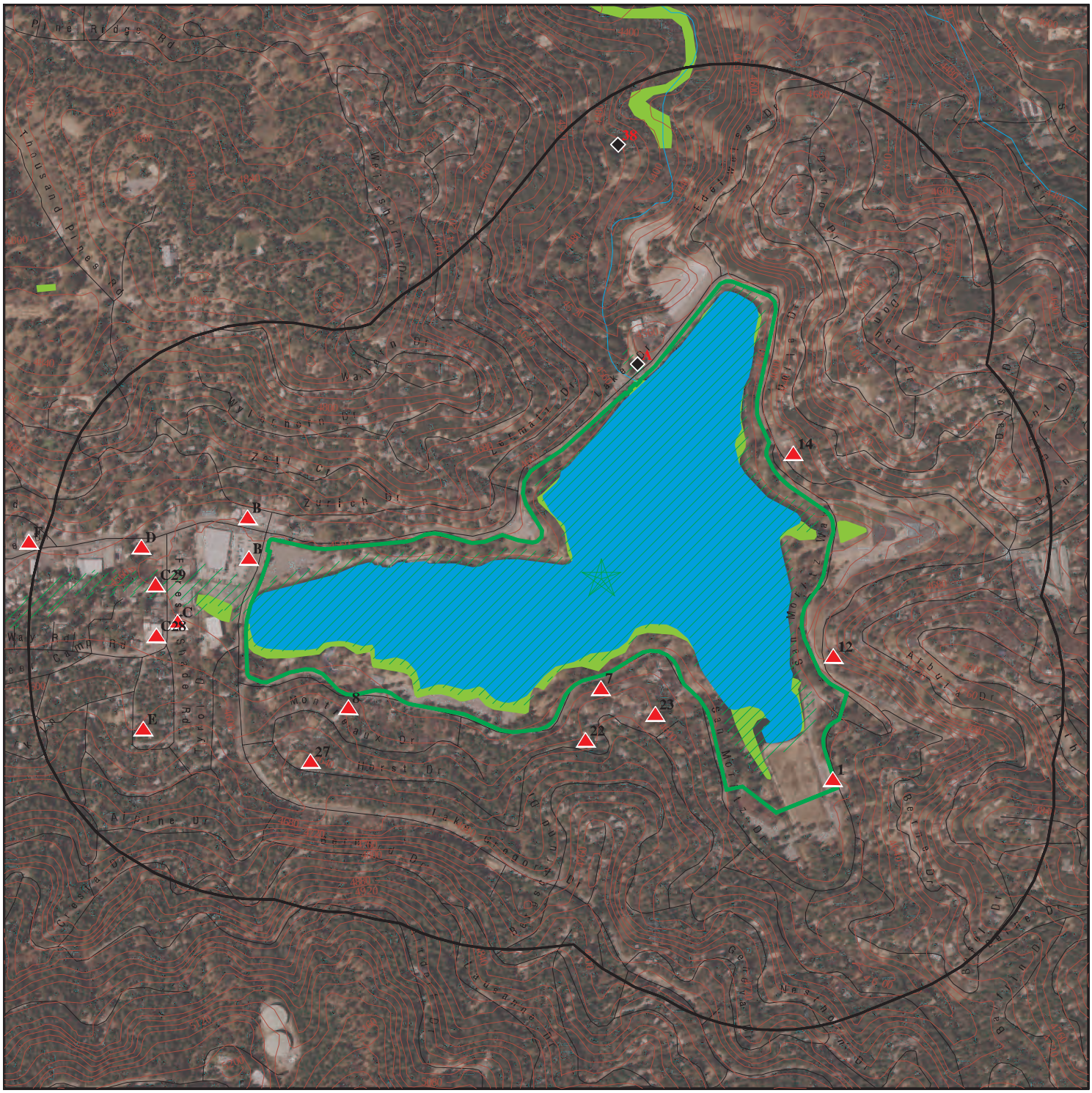
DETAIL MAP - 7456999.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/8 1/4 1/2 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Lake Gregory Sediment Mgmt	CLIENT:	Michael Baker International
ADDRESS:	Lake Gregory Sediment Mgmt Crestline CA 92325	CONTACT:	Kristen Bogue
		INQUIRY #:	7456999.2s
LAT/LONG:	34.242874 / 117.269253	DATE:	September 28, 2023 12:53 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		1	0	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	1	NR	1
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		3	0	2	NR	NR	5
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		3	1	NR	NR	NR	4
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		1	0	0	NR	NR	1
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		3	0	NR	NR	NR	3
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		2	2	NR	NR	NR	4
HIST UST	0.250		2	2	NR	NR	NR	4
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		10	2	NR	NR	NR	12
FUDS	1.000		0	0	0	2	NR	2
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	1	NR	1
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		1	1	NR	NR	NR	2
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		1	0	1	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	0	1	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
San Bern. Co. Permit	0.250		8	2	NR	NR	NR	10
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		1	0	0	0	NR	1
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
BIOSOLIDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	40	10	4	4	0	58

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1 **LAKE GREGORY LAYDOWN YARD** **RCRA NonGen / NLR** **1025828358**
24646 SAN MORTIZ DRIVE **CAC003007911**
< 1/8 **CRESTLINE, CA 92325**
1 ft.

Relative:
Higher

Actual:
4559 ft.

RCRA Listings:

Date Form Received by Agency:	20190329
Handler Name:	Lake Gregory Laydown Yard
Handler Address:	24646 SAN MORTIZ DRIVE
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003007911
Contact Name:	JASON J. THOMAS
Contact Address:	P.O. BOX 5085
Contact City,State,Zip:	ROSEMEAD, CA 91770
Contact Telephone:	626-302-3105
Contact Fax:	Not reported
Contact Email:	JASON.THOMAS@SCE.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	P.O. BOX 5085
Mailing City,State,Zip:	ROSEMEAD, CA 91770
Owner Name:	Southern California Edison
Owner Type:	Other
Operator Name:	Jason J. Thomas
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A

LAKE GREGORY LAYDOWN YARD (Continued) **1025828358**

Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190626
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: SOUTHERN CALIFORNIA EDISON	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P.O. BOX 5085
Owner/Operator City,State,Zip:	ROSEMEAD, CA 91770
Owner/Operator Telephone:	626-302-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: JASON J. THOMAS	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P.O. BOX 5085
Owner/Operator City,State,Zip:	ROSEMEAD, CA 91770
Owner/Operator Telephone:	626-302-3105
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190329
Handler Name: LAKE GREGORY LAYDOWN YARD	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

LAKE GREGORY LAYDOWN YARD (Continued) **1025828358**

List of NAICS Codes and Descriptions:
NAICS Code: 221121
NAICS Description: ELECTRIC BULK POWER TRANSMISSION AND CONTROL

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

A2 **MOUNTAIN TOP RENTALS** **EDR Hist Auto** **1020728890**
North **24517 LAKE DR** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.003 mi.
18 ft. **Site 1 of 5 in cluster A**

Relative: EDR Hist Auto
Higher
Actual:
4553 ft.

Year:	Name:	Type:
1979	MOUNTAIN TOP RENTALS	Gasoline Service Stations
1979	MOUNTAIN TOP RENTALS	Gasoline Service Stations
1980	MOUNTAIN TOP RENTALS	Gasoline Service Stations

A3 **DI-CRESTLINE SANITATION** **UST** **U004061614**
North **24516 LAKE DR** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.003 mi.
18 ft. **Site 2 of 5 in cluster A**

Relative: UST:
Higher
Actual:
4553 ft.

Name:	DI-CRESTLINE SANITATION
Address:	24516 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Facility ID:	87013996
Permitting Agency:	SAN BERNARDINO COUNTY
CERSID:	Not reported
Latitude:	34.24523
Longitude:	-117.26984
Owner type:	Not reported
Facility type:	Not reported
Num of inuse ust:	Not reported
Num of closed ust:	Not reported
Num of oos ust:	Not reported
Epa region:	Not reported
Tribal lands:	Not reported
Tank owner name:	Not reported
Tank owner mailing address:	Not reported
Tank owner mailing city:	Not reported
Tank owner mailing zip:	Not reported
Tank owner mailing state:	Not reported
Tank operator name:	Not reported
Tank operator mailing address:	Not reported
Tank operator mailing city:	Not reported
Tank operator mailing zip:	Not reported

DI-CRESTLINE SANITATION (Continued) **U004061614**

Tank operator mailing state:	Not reported
Tankidnumber:	Not reported
Tank status:	Not reported
Tank configuration:	Not reported
Tank closure date:	Not reported
Tank installation date:	Not reported
Tank num of compartments:	Not reported
Tank contents:	Not reported
Tank capacity gallons:	Not reported
Tank type:	Not reported
Tank pc construction:	Not reported
Tank pwpiping construction:	Not reported
Tank piping type:	Not reported
Tank piping construction:	Not reported
Tank sacrificial anode:	Not reported
Tank cp impressed current:	Not reported
Tank cp shutoff:	Not reported
Tank alarms:	Not reported
Tank ball float:	Not reported
Tank spill bucket:	Not reported

A4 **DISTRICT OFFICE** **HIST UST** **U001574721**
North **24516 LAKE DRIVE** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.003 mi.
18 ft. **Site 3 of 5 in cluster A**

Relative:
Higher

Actual:
4553 ft.

HIST UST:

Name:	DISTRICT OFFICE
Address:	24516 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
File Number:	00029d44
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/00029d44.pdf
Region:	STATE
Facility ID:	00000031957
Facility Type:	Other
Other Type:	Not reported
Contact Name:	BRAD CARY
Telephone:	7143381751
Owner Name:	CRESTLINE SANITATION DIST.
Owner Address:	24516 LAKE DRIVE
Owner City,St,Zip:	CRESTLINE, CA 92325
Total Tanks:	0002
Tank Num:	001
Container Num:	G-100
Year Installed:	1983
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	.235
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	D-100
Year Installed:	1983
Tank Capacity:	00002000
Tank Used for:	PRODUCT

DISTRICT OFFICE (Continued) **U001574721**

Type of Fuel: DIESEL
Container Construction Thickness: .267
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

A5 North < 1/8 0.006 mi. 34 ft. | **SAN BERN. CO, CRESTLINE SANITA 24516 LAKE DR CRESTLINE, CA 92325** | **LUST SWEEPS UST EMI HAZNET San Bern. Co. Permit WDR CIWQS CERS HWTS** | **1006227612 N/A**

Site 4 of 5 in cluster A

Relative: Lower

Actual: 4551 ft.

LUST:

Name:	CRESTLINE SANITATION DISTRICT
Address:	24516 LAKE DR.
City,State,Zip:	CRESTLINE, CA 92325
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607192036
Global Id:	T0607192036
Latitude:	34.245809
Longitude:	-117.269139
Status:	Completed - Case Closed
Status Date:	03/20/2006
Case Worker:	JC
RB Case Number:	6B3601039T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Local Agency
Local Case Number:	2004029
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Diesel
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	10/06/2004
Leak Reported Date:	11/05/2004
How Discovered:	UST System Modification
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Other Means
Stop Description:	Not reported
No Further Action Date:	03/20/2006
CA Water Watershed Name:	Mojave - Upper Mojave (628.20)
Dwr Groundwater Subbasin Name:	Not reported
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	36-40%
CA Enviroscreen 4 Score:	40-45%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	LAHONTAN RWQCB (REGION 6V)
Site History:	Not reported

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

LUST:

Global Id:	T0607192036
Contact Type:	Local Agency Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

LUST:

Global Id:	T0607192036
Action Type:	ENFORCEMENT
Date:	03/20/2006
Action:	Closure/No Further Action Letter
Global Id:	T0607192036
Action Type:	Other
Date:	11/05/2004
Action:	Leak Reported
Global Id:	T0607192036
Action Type:	REMEDIATION
Date:	05/05/2006
Action:	Not reported
Global Id:	T0607192036
Action Type:	ENFORCEMENT
Date:	03/20/2006
Action:	Closure/No Further Action Letter
Global Id:	T0607192036
Action Type:	Other
Date:	10/06/2004
Action:	Leak Discovery

LUST:

Global Id:	T0607192036
Status:	Open - Case Begin Date
Status Date:	10/06/2004
Global Id:	T0607192036
Status:	Open - Site Assessment
Status Date:	11/05/2004
Global Id:	T0607192036
Status:	Completed - Case Closed
Status Date:	03/20/2006

SWEEPS UST:

Name:	CRESTLINE SANITATION
Address:	24516 LAKE DR
City:	CRESTLINE
Status:	Active

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

Comp Number:	31957
Number:	9
Board Of Equalization:	44-031711
Referral Date:	03-19-92
Action Date:	03-19-92
Created Date:	02-29-88
Owner Tank Id:	G-100
SWRCB Tank Id:	36-000-031957-000001
Tank Status:	A
Capacity:	2000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2

Name:	CRESTLINE SANITATION
Address:	24516 LAKE DR
City:	CRESTLINE
Status:	Active
Comp Number:	31957
Number:	9
Board Of Equalization:	44-031711
Referral Date:	03-19-92
Action Date:	03-19-92
Created Date:	02-29-88
Owner Tank Id:	D-100
SWRCB Tank Id:	36-000-031957-000002
Tank Status:	A
Capacity:	2000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not reported

EMI:

Name:	SAN BERN. CO, CRESTLINE SANITA
Address:	24516 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Year:	1990
County Code:	36
Air Basin:	SC
Facility ID:	42220
Air District Name:	SC
SIC Code:	9511
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

Name:	SAN BERN. CO, CRESTLINE SANITA
Address:	24516 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Year:	1995
County Code:	36
Air Basin:	SC
Facility ID:	42220
Air District Name:	SC
SIC Code:	9511
Air District Name:	SOUTH COAST AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	1
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HAZNET:

Name:	CRESTLINE SANITATION DISTRICT
Address:	24516 LAKE DR
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 923250000
Contact:	RICK DEVER
Telephone:	9093381751
Mailing Name:	Not reported
Mailing Address:	PO BOX 3395
Year:	2021
Gepaid:	CAL000360135
TSD EPA ID:	CAD982444481
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.29191
Year:	2021
Gepaid:	CAL000360135
TSD EPA ID:	AZR000520882
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.84
Year:	2019
Gepaid:	CAL000360135
TSD EPA ID:	CAD982444481
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.00000
Year:	2017
Gepaid:	CAL000360135
TSD EPA ID:	CAD982444481

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.125
Year:	2016
Gepaid:	CAL000360135
TSD EPA ID:	CAD982444481
CA Waste Code:	352 - Other organic solids
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.125

Additional Info:

Year:	2017
Gen EPA ID:	CAL000360135
Shipment Date:	20171023
Creation Date:	6/13/2018 18:30:46
Receipt Date:	20171023
Manifest ID:	000567380JJK
Trans EPA ID:	CAL000348567
Trans Name:	MELFRED INDUSTRIAL SERVICES INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD982444481
Trans Name:	FILTER RECYCLING SERVICES INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

San Bern. Co. Permit:

Name:	CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY
Address:	24516 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0002717
Owner:	Crestline Sanitation District
Permit Number:	PT0003417
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	09/30/2023
Name:	CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

Address: 24516 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002717
Owner: Crestline Sanitation District
Permit Number: PT0040159
Permit Category: HAZARDOUS WASTE CONSOLIDATION (NB)
Facility Status: ACTIVE
Expiration Date: 09/30/2023

Name: CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY
Address: 24516 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002717
Owner: Crestline Sanitation District
Permit Number: PT0003416
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 09/30/2023

Name: CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY
Address: 24516 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002717
Owner: Crestline Sanitation District
Permit Number: PT0011292
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 09/30/2009

Name: CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY
Address: 24516 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002717
Owner: Crestline Sanitation District
Permit Number: PT0011293
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 09/30/2009

WDR:
Name: CRESTLINE SD THREE WTF'S
Address: 24516 LAKE DRIVE
City,State,Zip: CRESTLINE, CA 92325
Global ID: WDR100029738
Status: ACTIVE - WDR
Census Tract: 6071010804

CIWQS:
Name: CRESTLINE SD THREE WTF'S
Address: 24516 LAKE DRIVE
City,State,Zip: CRESTLINE, CA 92325
Agency: Crestline SD

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

Agency Address:	Po Box 3395, Crestline, CA 92325
Place/Project Type:	Wastewater Treatment Facility
SIC/NAICS:	4952
Region:	6V
Program:	REC, WDRMUNILRG
Regulatory Measure Status:	Active
Regulatory Measure Type:	WDR
Order Number:	94-057
WDID:	6B360106001
NPDES Number:	Not reported
Adoption Date:	05/19/1994
Effective Date:	05/19/1994
Termination Date:	Not reported
Expiration/Review Date:	05/19/2004
Design Flow:	1.4
Major/Minor:	Not reported
Complexity:	B
TTWQ:	2
Enforcement Actions within 5 years:	3
Violations within 5 years:	80
Latitude:	34.254284
Longitude:	-117.270822

CERS:

Name:	SEELEY CREEK WWTF
Address:	24516 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	493281
CERS ID:	110055984458
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	RICK DEVER
Entity Title:	Not reported
Affiliation Address:	POBOX 3395
Affiliation City:	CRESTLINE
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	JACKSON CRUTSINGER SAN BERNARDINO CNTY
Entity Title:	Not reported
Affiliation Address:	620 SOUTH E STREET
Affiliation City:	SANBERNARDINO
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Property Owner
Entity Name:	CRESTLINE SANITN DIST
Entity Title:	Not reported
Affiliation Address:	POBOX 3395
Affiliation City:	CRESTLINE

SAN BERN. CO, CRESTLINE SANITA (Continued) **1006227612**

Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

HWTS:

Name:	CRESTLINE SANITATION DISTRICT
Address:	24516 LAKE DR
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAL000360135
Inactive Date:	Not reported
Create Date:	01/07/2011
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 3395
Mailing Address 2:	Not reported
Mailing City,State,Zip:	CRESTLINE, CA 923253395
Owner Name:	CRESTLINE SANITATION
Owner Address:	24516 LAKE DR
Owner Address 2:	Not reported
Owner City,State,Zip:	CRESTLINE, CA 923253395
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	RICK DEVER
Contact Address:	PO BOX 3395
Contact Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 923253395
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Active
Facility Type:	PERMANENT
Category:	STATE
Latitude:	34.24533
Longitude:	-117.2698

NAICS:

EPA ID:	CAL000360135
Create Date:	2011-01-07 09:12:35.040
NAICS Code:	92119
NAICS Description:	Other General Government Support
Issued EPA ID Date:	2011-01-07 09:12:35.01000
Inactive Date:	Not reported
Facility Name:	CRESTLINE SANITATION DISTRICT
Facility Address:	24516 LAKE DR
Facility Address 2:	Not reported
Facility City:	CRESTLINE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	923250000

B6 **LAKE GREGORY RECREATION COMPANY** **NPDES** **S105298766**
West **24171 LAKE DR** **San Bern. Co. Permit** **N/A**
< 1/8 **CRESTLINE, CA 92325** **CIWQS**
0.012 mi.
61 ft. **Site 1 of 11 in cluster B**

Relative:
Higher

Actual:
4561 ft.

NPDES:

Name:	LAKE GREGORY DAM REHABILITATION
Address:	24171 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	6B36C382836
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Terminated
Status Date:	03/16/2020
Operator Name:	San Bernardino County Regional Parks
Operator Address:	777 East Rialto Avenue
Operator City:	San Bernardino
Operator State:	California
Operator Zip:	92415

Name:	LAKE GREGORY REGIONAL PARK SILT MANAGEMENT PROJECT
Address:	24171 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	6B36W001328
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported

LAKE GREGORY RECREATION COMPANY (Continued) **S105298766**

Status:	Expired
Status Date:	06/13/2013
Operator Name:	San Bernardino County Regional Parks
Operator Address:	777 East Rialto Avenue
Operator City:	San Bernardino
Operator State:	California
Operator Zip:	92415

San Bern. Co. Permit:

Name:	LAKE GREGORY RECREATION COMPANY
Address:	24171 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0016162
Owner:	CALIFORNIA PARKS COMPANY
Permit Number:	PT0034915
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	INACTIVE
Expiration Date:	12/31/2015

Name:	LAKE GREGORY REGIONAL PRK
Address:	24171 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0004365
Owner:	SBC REGIONAL PARKS DEPT
Permit Number:	PT0004609
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	INACTIVE
Expiration Date:	12/31/2014

Name:	LAKE GREGORY REGIONAL PRK
Address:	24171 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0004365
Owner:	SBC REGIONAL PARKS DEPT
Permit Number:	PT0004610
Permit Category:	CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status:	INACTIVE
Expiration Date:	12/31/2013

CIWQS:

Name:	LAKE GREGORY DAM REHABILITATION
Address:	24171 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Agency:	San Bernardino County Regional Parks
Agency Address:	777 East Rialto Avenue, San Bernardino, CA 92415
Place/Project Type:	Construction - Reconstruction
SIC/NAICS:	Not reported
Region:	6V
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	6B36C382836

LAKE GREGORY RECREATION COMPANY (Continued) **S105298766**

NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	03/23/2018
Termination Date:	02/21/2020
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.248084
Longitude:	-117.268107

7
South
< 1/8
0.014 mi.
72 ft.

ROBERT AUGUR
24469 SAN MORITZ DR
CRESTLINE, CA 92325

RCRA NonGen / NLR **1027200925**
CAC003164689

Relative:
Higher

Actual:
4580 ft.

RCRA Listings:

Date Form Received by Agency:	20220303
Handler Name:	Robert Augur
Handler Address:	24469 SAN MORITZ DR
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003164689
Contact Name:	ROBERT AUGUR
Contact Address:	24469 SAN MORITZ DR
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	909-273-3772
Contact Fax:	Not reported
Contact Email:	AUGURB@GJS.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	24469 SAN MORITZ DR
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Robert Augur
Owner Type:	Other
Operator Name:	Robert Augur
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No

ROBERT AUGUR (Continued) **1027200925**

Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220308
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ROBERT AUGUR	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24469 SAN MORITZ DR
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	909-273-3772
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ROBERT AUGUR	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24469 SAN MORITZ DR
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	909-273-3772
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

ROBERT AUGUR (Continued) **1027200925**

Historic Generators:

Receive Date:	20220303
Handler Name:	ROBERT AUGUR
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

8
WSW
< 1/8
0.014 mi.
73 ft.

SEELEY CREEK WASTEWATER TREATMENT PLANT
700 SKYLAND SPUR RD
CRESTLINE, CA 92325

San Bern. Co. Permit **S102043888**
CERS **N/A**

Relative:
Higher

Actual:
4594 ft.

San Bern. Co. Permit:

Name:	SEELEY CREEK WASTEWATER TREATMENT PLANT
Address:	700 SKYLAND SPUR RD
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0006099
Owner:	Crestline Sanitation District
Permit Number:	PT0005429
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	ACTIVE
Expiration Date:	09/30/2023

Name:	SEELEY CREEK WASTEWATER TREATMENT PLANT
Address:	700 SKYLAND SPUR RD
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0006099
Owner:	Crestline Sanitation District
Permit Number:	PT0005431
Permit Category:	EPCRA FACILITY
Facility Status:	INACTIVE
Expiration Date:	09/30/2012

Name:	SEELEY CREEK WASTEWATER TREATMENT PLANT
Address:	700 SKYLAND SPUR RD

SEELEY CREEK WASTEWATER TREATMENT PLANT (Continued) **S102043888**

City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006099
Owner: Crestline Sanitation District
Permit Number: PT0005430
Permit Category: CALARP FACILITY PERMIT
Facility Status: INACTIVE
Expiration Date: 09/30/2011

Name: SEELEY CREEK WASTEWATER TREATMENT PLANT
Address: 700 SKYLAND SPUR RD
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006099
Owner: Crestline Sanitation District
Permit Number: PT0005425
Permit Category: RMP INSPECTION - PROGRAM 3
Facility Status: INACTIVE
Expiration Date: 09/30/2011

Name: SEELEY CREEK WASTEWATER TREATMENT PLANT
Address: 700 SKYLAND SPUR RD
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006099
Owner: Crestline Sanitation District
Permit Number: PT0012772
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR
Facility Status: INACTIVE
Expiration Date: 09/30/2003

CERS:
Name: SEELEY CREEK WASTEWATER TREATMENT PLANT
Address: 700 SKYLAND SPUR ROAD
City,State,Zip: CRESTLINE, CA 92325
Site ID: 401908
CERS ID: 10044610
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-26-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: routine inspection - Road onto facility being worked on. Had to walk in over 1 mile
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP

SEELEY CREEK WASTEWATER TREATMENT PLANT (Continued) **S102043888**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION OF SEELEY CREEK WASTEWATER TREATMENT PLANT.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:

Affiliation Type Desc: Legal Owner
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92325
Affiliation Phone: (909) 338-1751,

Affiliation Type Desc: Property Owner
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92325
Affiliation Phone: (909) 338-1751,

Affiliation Type Desc: Document Preparer
Entity Name: Ron Scriven
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Environmental Contact
Entity Name: Ron Scriven
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline

SEELEY CREEK WASTEWATER TREATMENT PLANT (Continued) **S102043888**

Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 338-1751,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325-9232
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Ron Scriven
Entity Title:	General Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

A9 **CRESTLINE SANITATION DISTRICT** **CERS HAZ WASTE** **S113112939**
North **24516 LAKE DR** **HAZNET** **N/A**
< 1/8 **CRESTLINE, CA 92325** **CERS**
0.016 mi. **HWTS**
82 ft. **Site 5 of 5 in cluster A**

Relative:
Lower

Actual:
4547 ft.

CERS HAZ WASTE:

Name:	CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY
Address:	24516 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	108785
CERS ID:	10038562

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

CERS Description: Hazardous Waste Generator

HAZNET:

Name:	CRESTLINE SANITATION DISTRICT
Address:	24516 LAKE DR
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 923250000
Contact:	MARK PATTISON
Telephone:	9093381751
Mailing Name:	Not reported
Mailing Address:	PO BOX 3395
Year:	2009
Gepaid:	CAL000223794
TSD EPA ID:	CAD099452708
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	1.14
Year:	2009
Gepaid:	CAL000223794
TSD EPA ID:	CAD980884183
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.125
Year:	2008
Gepaid:	CAL000223794
TSD EPA ID:	CAD009007626
CA Waste Code:	151 - Asbestos containing waste
Disposal Method:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.8
Year:	2005
Gepaid:	CAL000223794
TSD EPA ID:	CAD980884183
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	D80 - Disposal, Land Fill
Tons:	0.1
Year:	2004
Gepaid:	CAL000223794
TSD EPA ID:	CAT080033681
CA Waste Code:	352 - Other organic solids
Disposal Method:	D80 - Disposal, Land Fill
Tons:	0.9
Year:	2004
Gepaid:	CAL000223794
TSD EPA ID:	CAT080033681
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	R01 - Recycler
Tons:	0.25

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Year:	2004
Gepaid:	CAL000223794
TSD EPA ID:	CAT080033681
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	D80 - Disposal, Land Fill
Tons:	0.05

Year:	2004
Gepaid:	CAL000223794
TSD EPA ID:	IND000646943
CA Waste Code:	181 - Other inorganic solid waste
Disposal Method:	T03 - Treatment, Incineration
Tons:	0.025

Year:	2003
Gepaid:	CAL000223794
TSD EPA ID:	CAT080033681
CA Waste Code:	343 - Unspecified organic liquid mixture
Disposal Method:	D80 - Disposal, Land Fill
Tons:	0.374

Year:	2003
Gepaid:	CAL000223794
TSD EPA ID:	CAT080033681
CA Waste Code:	352 - Other organic solids
Disposal Method:	D80 - Disposal, Land Fill
Tons:	0.015

Click this hyperlink while viewing on your computer to access additional CA HAZNET: detail in the EDR Site Report.

Additional Info:

Year:	2009
Gen EPA ID:	CAL000223794
Shipment Date:	20090507
Creation Date:	6/27/2009 18:30:20
Receipt Date:	20090601
Manifest ID:	000561916JJK
Trans EPA ID:	CAD980893325
Trans Name:	GOLDEN WEST OIL CO INC
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	GENERAL ENVIRONMENTAL MANAGEMENT
TSDF EPA ID:	CAD980884183
Trans Name:	GEM RANCHO CORDOVA LLC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	H141 - Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Quantity Tons:	0.125
Waste Quantity:	250
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20090114
Creation Date:	3/9/2009 18:30:46
Receipt Date:	20090115
Manifest ID:	000799420GBF
Trans EPA ID:	CAD982488470
Trans Name:	SWIFT OIL & VACUUM INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD099452708
Trans Name:	INDUSTRIAL SERVICE OIL CO INC
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	1.14
Waste Quantity:	300
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2008
Gen EPA ID:	CAL000223794
Shipment Date:	20080715
Creation Date:	8/29/2008 18:30:24
Receipt Date:	20080717
Manifest ID:	000789488FLE
Trans EPA ID:	CAR000053173
Trans Name:	BRICKLEY ENVIRONMENTAL
Trans 2 EPA ID:	CAR000049064
Trans 2 Name:	ECTI
TSDF EPA ID:	CAD009007626
Trans Name:	AZUSA LAND RECLAMATION
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	H132 - Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Quantity Tons:	0.8
Waste Quantity:	2
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Additional Info:

Year:	2005
Gen EPA ID:	CAL000223794
Shipment Date:	20050516
Creation Date:	8/17/2005 18:31:07
Receipt Date:	20050526
Manifest ID:	22773643
Trans EPA ID:	CAD980893325
Trans Name:	GOLDEN WEST OIL CO INC
Trans 2 EPA ID:	CAD983649880
Trans 2 Name:	GENERAL ENVIRONMENTAL MANAGEMENT
TSDF EPA ID:	CAD980884183
Trans Name:	GENERAL ENVIRONMENTAL MANAGEMENT
TSDF Alt EPA ID:	CAD980884183
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.1
Waste Quantity:	200
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2004
Gen EPA ID:	CAL000223794
Shipment Date:	20041217
Creation Date:	3/17/2005 18:34:39
Receipt Date:	20041222
Manifest ID:	24037001
Trans EPA ID:	CAR000047613
Trans Name:	CAL WEST ENVIRONMENTAL SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080033681
Trans Name:	D/K ENVIRONMENTAL
TSDF Alt EPA ID:	CAT080033681
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	NONE
Meth Code:	R01 - Recycler
Quantity Tons:	0.25
Waste Quantity:	500
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Shipment Date:	20041217
Creation Date:	3/17/2005 18:34:39
Receipt Date:	20041222
Manifest ID:	24037001
Trans EPA ID:	CAR000047613
Trans Name:	CAL WEST ENVIRONMENTAL SVCS INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080033681
Trans Name:	D/K ENVIRONMENTAL
TSDF Alt EPA ID:	CAT080033681
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	NONE
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.9
Waste Quantity:	1800
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040114
Creation Date:	8/20/2004 9:41:48
Receipt Date:	20040209
Manifest ID:	22772234
Trans EPA ID:	CAD980893325
Trans Name:	GOLDEN WEST OIL CO INC
Trans 2 EPA ID:	CAL931024038
Trans 2 Name:	PRIME ENVIRONMENTAL
TSDF EPA ID:	IND000646943
Trans Name:	PCI
TSDF Alt EPA ID:	IND000646943
TSDF Alt Name:	Not reported
Waste Code Description:	181 - Other inorganic solid waste Organics
RCRA Code:	D001
Meth Code:	T03 - Treatment, Incineration
Quantity Tons:	0.025
Waste Quantity:	50
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	20040113
Creation Date:	8/20/2004 9:31:41
Receipt Date:	20040123
Manifest ID:	22772189
Trans EPA ID:	CAD980893325
Trans Name:	GOLDEN WEST OIL CO INC
Trans 2 EPA ID:	CAL931024038
Trans 2 Name:	PRIME ENVIRONMENTAL
TSDF EPA ID:	CAT080033681

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Trans Name:	D K ENVIRONMENTAL
TSDF Alt EPA ID:	CAT080033681
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.05
Waste Quantity:	100
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Additional Info:

Year:	2003
Gen EPA ID:	CAL000223794
Shipment Date:	20030414
Creation Date:	6/23/2004 9:59:25
Receipt Date:	20030424
Manifest ID:	22452198
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080033681
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080033681
TSDF Alt Name:	Not reported
Waste Code Description:	343 - Unspecified organic liquid mixture
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.374
Waste Quantity:	110
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	20030414
Creation Date:	6/23/2004 9:59:25
Receipt Date:	20030424
Manifest ID:	22452145
Trans EPA ID:	CAD028277036
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080033681
Trans Name:	Not reported
TSDF Alt EPA ID:	CAT080033681
TSDF Alt Name:	Not reported
Waste Code Description:	352 - Other organic solids
RCRA Code:	Not reported

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	0.015
Waste Quantity:	30
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

CERS:

Name:	CRESTLINE SANITATION DISTRICT- DISTRICT OFFICES / MAINTENANCE FACILITY
Address:	24516 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	108785
CERS ID:	10038562
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	108785
Site Name:	Crestline Sanitation District- District Offices / Maintenance Facility
Violation Date:	05-26-2020
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 05/26/2020. Observed (1) 120 gallon container of lubricating oil and (1) 251 cubic foot cylinder of oxygen, that were not disclosed in the hazardous materials inventory submitted via CERS on 12/30/2019. Violation corrected on site; operator resubmitted a complete and accurate hazardous materials inventory via CERS.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	108785
Site Name:	Crestline Sanitation District- District Offices / Maintenance Facility
Violation Date:	05-26-2020
Citation:	HSC 6.5 25123.3(h)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)
Violation Description:	Failure to send hazardous waste offsite for treatment, storage, or disposal within 180 days (or 270 days if waste is transported over 200 miles) for a generator who generates less than 1000 kilogram per month if all of the following conditions are met: (1) The quantity of hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2) The generator complies with the requirements of 40 Code of Federal Regulations section 262.34(d), (e) and (f). (3) The generator does not hold acutely hazardous waste or extremely hazardous waste in an amount greater than one kilogram for more than 90 days.
Violation Notes:	Returned to compliance on 06/10/2020. Observed (3) 55 gallon drums of used lubricating oil and (1) 55 gallon drum of waste antifreeze to have content and exceeded the accumulation time frame for the facility. The accumulation start date on the hazardous waste labeling affixed to those drums was disclosed as 10/04/2019. CORRECTIVE ACTION: Sign the Certificate of Compliance indicating that all hazardous waste

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

that exceeded the accumulation time frame for this facility has been transported off site by a licensed hazardous waste transporter. Provide this Division with a copy of the associated disposal record. The accumulation time frame for this facility is 180 days.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE GENERATOR INSPECTION OF CRESTLINE SANITATION DISTRICT - DISTRICT OFFICE MAINTENANCE FACILITY.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspeciton
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-26-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-26-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION OF CRESTLINE SANITATION DISTRICT - DISTRICT OFFICE MAINTENANCE FACILITY.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Eval Date: 09-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: Operator
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (909) 338-1751,

Affiliation Type Desc: Parent Corporation
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Document Preparer
Entity Name: Ron Scriven
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92325-9232
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92325

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Affiliation Phone: (909) 338-1751,

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Identification Signer
Entity Name: Ron Scriven
Entity Title: General Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Ron Scriven
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92325-3395
Affiliation Phone: ,

Affiliation Type Desc: Property Owner
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 92325
Affiliation Phone: (909) 338-1751,

Name: CRESTLINE SANITATION DISTRICT
Address: 24516 LAKE DR.
City,State,Zip: CRESTLINE, CA 92325
Site ID: 648473
CERS ID: T0607192036
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: JACKSON CRUTSINGER - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported

CRESTLINE SANITATION DISTRICT (Continued) **S113112939**

Affiliation Zip: Not reported
Affiliation Phone: ,

HWTS:

Name:	CRESTLINE SANITATION DISTRICT
Address:	24516 LAKE DR
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAL000223794
Inactive Date:	06/06/2011
Create Date:	10/05/2001
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 3395
Mailing Address 2:	Not reported
Mailing City,State,Zip:	CRESTLINE, CA 923253395
Owner Name:	SAN BERNARDINO COUNTY
Owner Address:	24516 LAKE DR
Owner Address 2:	Not reported
Owner City,State,Zip:	CRESTLINE, CA 923250000
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	MARK PATTISON
Contact Address:	PO BOX 3395
Contact Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 923253395
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	34.24533
Longitude:	-117.2698

NAICS:

EPA ID:	CAL000223794
Create Date:	2002-03-14 16:36:29.000
NAICS Code:	92119
NAICS Description:	Other General Government Support
Issued EPA ID Date:	2001-10-05 00:00:00
Inactive Date:	2011-06-06 00:00:00
Facility Name:	CRESTLINE SANITATION DISTRICT
Facility Address:	24516 LAKE DR
Facility Address 2:	Not reported
Facility City:	CRESTLINE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	923250000

B10 West < 1/8 0.022 mi. 114 ft. | **GOODWIN AND SONS MARKET 24089 LAKE GREGORY DRIVE CRESTLINE, CA 92325** | **RCRA NonGen / NLR** | **1026817559 CAC003130319**

Site 2 of 11 in cluster B

Relative: Higher

Actual: 4558 ft.

RCRA Listings:

Date Form Received by Agency:	20210720
Handler Name:	Goodwin And Sons Market
Handler Address:	24089 LAKE GREGORY DRIVE
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003130319
Contact Name:	ALL VALLEY ENVIRONMENTAL
Contact Address:	PO BOX 7003
Contact City,State,Zip:	BIG BEAR LAKE, CA 92315
Contact Telephone:	909-584-9284
Contact Fax:	Not reported
Contact Email:	AVEWASTE@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 7003
Mailing City,State,Zip:	BIG BEAR LAKE, CA 92315
Owner Name:	All Valley Environmental
Owner Type:	Other
Operator Name:	All Valley Environmental
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

GOODWIN AND SONS MARKET (Continued) **1026817559**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210721
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	ALL VALLEY ENVIRONMENTAL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 7003
Owner/Operator City,State,Zip:	BIG BEAR LAKE, CA 92315
Owner/Operator Telephone:	909-584-9284
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	ALL VALLEY ENVIRONMENTAL
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 7003
Owner/Operator City,State,Zip:	BIG BEAR LAKE, CA 92315
Owner/Operator Telephone:	909-584-9284
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210720
Handler Name:	GOODWIN AND SONS MARKET
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

GOODWIN AND SONS MARKET (Continued) **1026817559**

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

B11
West
< 1/8
0.022 mi.
114 ft.

MT COMMUNITIES RECYCLE CENTER **SWRCY** **S107137339**
24089 LAKE GREGORY DR **N/A**
CRESTLINE, CA 92325

Site 3 of 11 in cluster B

Relative:
Higher

Actual:
4558 ft.

SWRCY:

Name:	MT COMMUNITIES RECYCLE CENTER
Address:	24089 LAKE GREGORY DR
City,State,Zip:	CRESTLINE, CA 92325
Reg Id:	24344
Cert Id:	RC11066
Mailing Address:	Po Box 4878
Mailing City:	Crestline
Mailing State:	CA
Mailing Zip Code:	92325
Website:	Not reported
Email:	Not reported
Phone Number:	(909) 338-7251
Rural:	Y
Operation Begin Date:	03/29/2002
Aluminium:	Y
Glass:	Y
Plastic:	Y
Bimetal:	Y
Hours of Operation:	Mon 7:00 am - 5:00 pm; Tue - Fri Closed; Sat - Sun 7:00 am - 5:00 pm
Organization ID:	18644
Organization Name:	The Ronald Carroll Co

12
ESE
< 1/8
0.023 mi.
123 ft.

CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIF **CHMIRS** **S107449389**
24689 SAN MORITZ WAY **San Bern. Co. Permit** **N/A**
CRESTLINE, CA 92325 **CERS**

Relative:
Higher

Actual:
4612 ft.

CHMIRS:

Name:	Not reported
Address:	24689 SAN MORITZ WAY
City,State,Zip:	CRESTLINE, CA
OES Incident Number:	4-6924
OES notification:	12/31/2004
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	**Not reported**

CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIFT STATION (Continued) **S107449389**

Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Not reported
Waterway:	Lake Gregory
Spill Site:	Not reported
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2004
Agency:	San Bernardino Co. Water and Sanitation
Incident Date:	12/31/200412:00:00 AM
Admin Agency:	San Bernardino County Health Department
Amount:	Not reported
Contained:	Yes
Site Type:	Treatment/Sewage Facility
E Date:	Not reported
Substance:	Sewage
Gallons:	500
Unknown:	0
Substance #2:	Not reported
Substance #3:	Not reported
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
#1 Pipeline:	Not reported
#2 Pipeline:	Not reported
#3 Pipeline:	Not reported
#1 Vessel >= 300 Tons:	Not reported
#2 Vessel >= 300 Tons:	Not reported
#3 Vessel >= 300 Tons:	Not reported
Evacs:	Not reported

CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIFT STATION (Continued) **S107449389**

Injuries: Not reported
Fatals: Not reported
Comments: Not reported
Description: A power failure caused spill at lift station.

San Bern. Co. Permit:
Name: CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIFT STATION
Address: 24689 SAN MORITZ WAY
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0011398
Owner: Crestline Sanitation District
Permit Number: PT0019726
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status: ACTIVE
Expiration Date: 02/28/2024

CERS:
Name: CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIFT STATION
Address: 24689 SAN MORITZ WAY
City,State,Zip: CRESTLINE, CA 92325
Site ID: 108786
CERS ID: 10052773
CERS Description: Chemical Storage Facilities

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspection
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-26-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION FOR GREGORY SEWAGE LIFT STATION.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 108786
Facility Name: Crestline Sanitation District - Gregory Sewage Lift Station

CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIFT STATION (Continued) **S107449389**

Env Int Type Code:	HMBP
Program ID:	10052773
Coord Name:	Not reported
Ref Point Type Desc:	Unknown,
Latitude:	34.243265
Longitude:	-117.264134

Affiliation:

Affiliation Type Desc:	Document Preparer
Entity Name:	Ron Scriven
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325-9232
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-1751,

Affiliation Type Desc:	Property Owner
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-1751,

Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,

CRESTLINE SANITATION DISTRICT - GREGORY SEWAGE LIFT STATION (Continued) **S107449389**

Affiliation Type Desc:	Identification Signer
Entity Name:	Ron Scriven
Entity Title:	General Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Ron Scriven
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 338-1751,

B13 **BILLS ARCO** **EDR Hist Auto** **1020190940**
West **24157 LAKE DR** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.026 mi.
138 ft. **Site 4 of 11 in cluster B**

Relative: EDR Hist Auto
Higher

Actual:
4560 ft.

Year:	Name:	Type:
1972	CRESTLINE ARCO	Gasoline Service Stations
1973	CRESTLINE ARCO	Gasoline Service Stations
1974	CRESTLINE ARCO	Gasoline Service Stations
1975	CRESTLINE ARCO	Gasoline Service Stations
1976	CRESTLINE ARCO	Gasoline Service Stations
1977	BILLS ARCO	Gasoline Service Stations
1978	BILLS ARCO	Gasoline Service Stations
1979	BILLS ARCO	Gasoline Service Stations

BILLS ARCO (Continued) **1020190940**

1980	BILLS ARCO	Gasoline Service Stations
1982	BILLS ARCO	Gasoline Service Stations
1983	BILLS ARCO	Gasoline Service Stations
1985	BILLS ARCO	Gasoline Service Stations

14
ENE
< 1/8
0.029 mi.
154 ft.

PETER MCGUAN
24680 LAKE DRIVE
CRESTLINE, CA 92325

RCRA NonGen / NLR **1026473488**
CAC003079155

Relative:
Higher

Actual:
4593 ft.

RCRA Listings:

Date Form Received by Agency:	20200813
Handler Name:	Peter Mcguan
Handler Address:	24680 LAKE DRIVE
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003079155
Contact Name:	PETER MCGUAN
Contact Address:	24680 LAKE DRIVE
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	760-218-8938
Contact Fax:	Not reported
Contact Email:	TAMMYHURLEY@ALLIANCE-ENVIRO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	24680 LAKE DRIVE
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Peter Mcguan
Owner Type:	Other
Operator Name:	Peter Mcguan
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline

PETER MCGUAN (Continued) **1026473488**

202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200814
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: PETER MCGUAN	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24680 LAKE DRIVE
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	760-218-8938
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: PETER MCGUAN	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24680 LAKE DRIVE
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	760-218-8938
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200813
Handler Name: PETER MCGUAN	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No

PETER MCGUAN (Continued) **1026473488**

Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

B15 **SEVEN-11 STORE #23818** **UST** **U004350378**
West **24156 LAKE DR** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.037 mi.
195 ft. **Site 5 of 11 in cluster B**

Relative:
Higher

Actual:
4564 ft.

UST:

Name:	SEVEN-11 STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Facility ID:	86008869
Permitting Agency:	SAN BERNARDINO COUNTY
CERSID:	Not reported
Latitude:	34.2452754
Longitude:	-117.2752172
Owner type:	Not reported
Facility type:	Not reported
Num of inuse ust:	Not reported
Num of closed ust:	Not reported
Num of oos ust:	Not reported
Epa region:	Not reported
Tribal lands:	Not reported
Tank owner name:	Not reported
Tank owner mailing address:	Not reported
Tank owner mailing city:	Not reported
Tank owner mailing zip:	Not reported
Tank owner mailing state:	Not reported
Tank operator name:	Not reported
Tank operator mailing address:	Not reported
Tank operator mailing city:	Not reported
Tank operator mailing zip:	Not reported
Tank operator mailing state:	Not reported
Tankidnumber:	Not reported
Tank status:	Not reported
Tank configuration:	Not reported
Tank closure date:	Not reported
Tank installation date:	Not reported
Tank num of compartments:	Not reported
Tank contents:	Not reported

SEVEN-11 STORE #23818 (Continued) **U004350378**

Tank capacity gallons:	Not reported
Tank type:	Not reported
Tank pc construction:	Not reported
Tank pwpiping construction:	Not reported
Tank piping type:	Not reported
Tank piping construction:	Not reported
Tank sacrificial anode:	Not reported
Tank cp impressed current:	Not reported
Tank cp shutoff:	Not reported
Tank alarms:	Not reported
Tank ball float:	Not reported
Tank spill bucket:	Not reported

B16 **SEVEN-ELEVEN STORE #23818** **LUST** **S102423521**
West **24156 LAKE DR** **CERS HAZ WASTE** **N/A**
< 1/8 **CRESTLINE, CA 92325** **CERS TANKS**
0.037 mi. **ENF**
195 ft. **Site 6 of 11 in cluster B** **HIST CORTESE**
San Bern. Co. Permit
Relative: **CIWQS**
Higher **CERS**

Actual:
4564 ft.

LUST:

Name:	7-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Lead Agency:	LAHONTAN RWQCB (REGION 6T)
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100722
Global Id:	T0607100722
Latitude:	34.243872
Longitude:	-117.276357
Status:	Completed - Case Closed
Status Date:	10/05/2012
Case Worker:	BDG
RB Case Number:	6B3600237T
Local Agency:	SAN BERNARDINO COUNTY
File Location:	Regional Board
Local Case Number:	90174
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Benzene, Toluene, Xylene, MTBE / TBA / Other Fuel Oxygenates, Gasoline
EPA Region:	9
Coordinate Source:	Manual Entry on Screens
Cuf Case:	YES
Quantity Released Gallons:	Not reported
Begin Date:	07/12/1990
Leak Reported Date:	10/23/1990
How Discovered:	Site Assessment/Site Investigation, UST System Modification
How Discovered Description:	Release discovered during system upgrades
Discharge Source:	Dispenser, Other, Piping, Tank, STP
Discharge Cause:	Corrosion, Other, Overfill, Spill, Physc / Mech Damage
Stop Method:	Change Operating Procedures, Close and Replace Tank, Repair Product Piping, Repair Tank, Replace Vapor Recovery Piping, Replace product piping
Stop Description:	Unknown
No Further Action Date:	10/05/2012
CA Water Watershed Name:	Mojave - Upper Mojave (628.20)
Dwr Groundwater Subbasin Name:	Not reported

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Disadvantaged Community: Not reported
CA Enviroscreen 3 Score: 56-60%
CA Enviroscreen 4 Score: 40-45%
Military DOD Site: No
Facility Project Subtype: Not reported
RWQCB Region: LAHONTAN RWQCB (REGION 6V)
Site History: Not reported

LUST:
Global Id: T0607100722
Contact Type: Regional Board Caseworker - Primary Caseworker
Contact Name: BRIAN GREY
Organization Name: LAHONTAN RWQCB (REGION 6T)
Address: 2501 LAKE TAHOE BOULEVARD
City: SOUTH LAKE TAHOE
Email: bgrey@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0607100722
Contact Type: Local Agency Caseworker
Contact Name: CURTIS BRUNDAGE
Organization Name: SAN BERNARDINO COUNTY
Address: 620 S. E STREET
City: SAN BERNARDINO
Email: cbrundage@sbcfire.org
Phone Number: Not reported

LUST:
Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 07/23/2009
Action: Letter - Notice

Global Id: T0607100722
Action Type: Other
Date: 07/12/1990
Action: Leak Discovery

Global Id: T0607100722
Action Type: RESPONSE
Date: 06/25/2003
Action: Other Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/06/2003
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/15/2003
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/17/2003
Action: Other Report / Document

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/15/2003
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/30/2003
Action: Other Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/05/2004
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/08/2004
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/09/2007
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/16/2007
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/10/2007
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/10/2008
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/15/2010
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 01/28/2009
Action: Meeting

Global Id: T0607100722
Action Type: Other

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Date: 10/23/1990
Action: Leak Reported

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/06/2003
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/06/2003
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/21/2003
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/24/2003
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/23/2003
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/14/2006
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 02/08/2007
Action: Unknown

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/13/2006
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/10/2006
Action: Unknown

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/11/2007
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/30/2013
Action: Well Destruction Report

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 06/16/2003
Action: Staff Letter

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 03/11/2009
Action: Staff Letter

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 12/08/2008
Action: Staff Letter

Global Id: T0607100722
Action Type: RESPONSE
Date: 12/19/2008
Action: Tank Removal Report / UST Sampling Report

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/13/2006
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/25/2005
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/15/2010
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/15/2010
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/01/2010
Action: Site Assessment Report

Global Id: T0607100722
Action Type: RESPONSE
Date: 06/11/2012
Action: Request for Closure

Global Id: T0607100722
Action Type: ENFORCEMENT

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Date: 06/03/2003
Action: Site Visit / Inspection / Sampling

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 07/30/2003
Action: Staff Letter

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 04/21/2010
Action: Verbal Enforcement

Global Id: T0607100722
Action Type: RESPONSE
Date: 11/06/2008
Action: Correspondence

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/15/2009
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 02/27/2009
Action: Other Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 03/21/2005
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/14/2004
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/11/2005
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 02/22/2005
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/20/2003
Action: Remedial Progress Report

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Global Id: T0607100722
Action Type: RESPONSE
Date: 06/26/2003
Action: Other Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/07/2003
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 12/08/2003
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 08/22/2003
Action: Other Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/11/2007
Action: Unknown

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/14/2006
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/10/2005
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/15/2010
Action: Monitoring Report - Semi-Annually

Global Id: T0607100722
Action Type: RESPONSE
Date: 10/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/15/2012
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: REMEDIATION

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Date: 09/18/2008
Action: Excavation

Global Id: T0607100722
Action Type: REMEDIATION
Date: 07/26/2001
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0607100722
Action Type: REMEDIATION
Date: 07/17/2000
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100722
Action Type: REMEDIATION
Date: 07/18/1997
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100722
Action Type: REMEDIATION
Date: 07/31/1997
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0607100722
Action Type: REMEDIATION
Date: 02/14/2007
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0607100722
Action Type: REMEDIATION
Date: 02/09/2006
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100722
Action Type: REMEDIATION
Date: 07/21/2011
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 12/06/1990
Action: * No Action

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 04/03/2002
Action: Staff Letter

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 04/23/2003
Action: Staff Letter

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 12/07/2002
Action: Site Visit / Inspection / Sampling

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 10/21/2009
Action: Verbal Enforcement

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 07/20/2009
Action: Letter - Notice

Global Id: T0607100722
Action Type: ENFORCEMENT
Date: 10/05/2012
Action: Closure/No Further Action Letter

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/01/2009
Action: CAP/RAP - Feasibility Study Report

Global Id: T0607100722
Action Type: RESPONSE
Date: 12/23/2008
Action: Correspondence

Global Id: T0607100722
Action Type: RESPONSE
Date: 09/05/2008
Action: Well Destruction Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/15/2008
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/16/2004
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 11/22/2004
Action: Other Workplan

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/12/2004
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 09/02/2003
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Date: 07/13/2005
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/23/2004
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/06/2004
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 11/22/2004
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 11/05/2004
Action: Unauthorized Release Form

Global Id: T0607100722
Action Type: RESPONSE
Date: 05/18/2004
Action: Other Report / Document

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/10/2007
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/10/2008
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 12/27/2010
Action: Remedial Progress Report

Global Id: T0607100722
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 04/15/2011
Action: Monitoring Report - Quarterly

Global Id: T0607100722
Action Type: RESPONSE
Date: 07/15/2011
Action: Monitoring Report - Quarterly

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

LUST:

Global Id:	T0607100722
Status:	Open - Case Begin Date
Status Date:	07/12/1990
Global Id:	T0607100722
Status:	Open - Site Assessment
Status Date:	12/06/1990
Global Id:	T0607100722
Status:	Open - Site Assessment
Status Date:	01/30/1991
Global Id:	T0607100722
Status:	Open - Remediation
Status Date:	06/10/1992
Global Id:	T0607100722
Status:	Open - Remediation
Status Date:	04/25/1994
Global Id:	T0607100722
Status:	Open - Remediation
Status Date:	10/20/2003
Global Id:	T0607100722
Status:	Open - Verification Monitoring
Status Date:	01/23/2004
Global Id:	T0607100722
Status:	Open - Verification Monitoring
Status Date:	09/14/2005
Global Id:	T0607100722
Status:	Open - Remediation
Status Date:	02/05/2009
Global Id:	T0607100722
Status:	Open - Remediation
Status Date:	07/21/2011
Global Id:	T0607100722
Status:	Completed - Case Closed
Status Date:	10/05/2012

CERS HAZ WASTE:

Name:	7-ELEVEN INC. #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	867
CERS ID:	10044655
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	7-ELEVEN INC. #23818

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	867
CERS ID:	10044655
CERS Description:	Underground Storage Tank

ENF:

Name:	SEVEN-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	Not reported
Facility Id:	256388
Agency Name:	7-Eleven, Inc., Dallas
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	34.243425
Place Longitude:	-117.274546
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	DISCHLND
Program Category1:	UNREGS
Program Category2:	UNREGS
# Of Programs:	1
WDID:	6B369209001
Reg Measure Id:	161073
Reg Measure Type:	Unregulated
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	06/17/2005
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	247208
Region:	Not reported
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	10/16/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	02/02/2011
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 6B369209001
Description:	Spoke to discharger on 10-16-02. Discharger will submit report on 10-31-02.
Program:	DISCHLND
Latest Milestone Completion Date:	11/1/2002
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	SEVEN-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	Not reported
Facility Id:	256388
Agency Name:	7-Eleven, Inc., Dallas
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	34.243425
Place Longitude:	-117.274546
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0172
Threat To Water Quality:	3
Complexity:	A
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Contaminated ground water
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDNONMUNIPRCS
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	6B369209001
Reg Measure Id:	204388
Reg Measure Type:	Enrollee
Region:	Not reported
Order #:	95-126
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	1000
Status:	Historical
Status Date:	11/12/1992
Effective Date:	11/12/1992
Expiration/Review Date:	Not reported
Termination Date:	11/12/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	243633
Region:	Not reported
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	01/21/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	2/15/2000

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Termination Date:	01/21/2000
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 6B369209001
Description:	Phone call
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	2/15/2000
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	SEVEN-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	Not reported
Facility Id:	256388
Agency Name:	7-Eleven, Inc., Dallas
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	All other facilities
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	34.243425
Place Longitude:	-117.274546
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.0172
Threat To Water Quality:	3
Complexity:	A
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Contaminated ground water
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDNONMUNIPRCS
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	6B369209001

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Reg Measure Id:	204388
Reg Measure Type:	Enrollee
Region:	Not reported
Order #:	95-126
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	1000
Status:	Historical
Status Date:	11/12/1992
Effective Date:	11/12/1992
Expiration/Review Date:	Not reported
Termination Date:	11/12/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	237745
Region:	Not reported
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice of Violation
Effective Date:	06/27/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	7/27/2001
Termination Date:	06/27/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 6B369209001
Description:	Regional Board staff sent Discharger a NOV on 6-27-01.
Program:	NPDNONMUNIPRCS
Latest Milestone Completion Date:	7/27/2001
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

HIST CORTESE:

edr_fname:	7-ELEVEN #23818
edr_fadd1:	24156 LAKE
City,State,Zip:	CRESTLINE, CA
Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Reg Id: 6B3600237T

San Bern. Co. Permit:

Name: 7-ELEVEN INC #23818
Address: 24156 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006123
Owner: 7-ELEVEN INC.
Permit Number: PT0002249
Permit Category: HAZMAT HANDLER, UST ONLY - PER YEAR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: 7-ELEVEN INC #23818
Address: 24156 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006123
Owner: 7-ELEVEN INC.
Permit Number: PT0023828
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY -PER YEAR
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: 7-ELEVEN INC #23818
Address: 24156 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006123
Owner: 7-ELEVEN INC.
Permit Number: PT0020717
Permit Category: COMPLEX ANNUAL INSP VPH/ > 8 DISP (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: 7-ELEVEN INC #23818
Address: 24156 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006123
Owner: 7-ELEVEN INC.
Permit Number: PT0020718
Permit Category: COMPLEX ANNUAL INSP VPH/ > 8 DISP (PER TANK)
Facility Status: ACTIVE
Expiration Date: 10/31/2023

Name: 7-ELEVEN INC #23818
Address: 24156 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006123
Owner: 7-ELEVEN INC.
Permit Number: PT0012153
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2009

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Name:	7-ELEVEN INC #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0006123
Owner:	7-ELEVEN INC.
Permit Number:	PT0012154
Permit Category:	REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status:	INACTIVE
Expiration Date:	10/31/2009

CIWQS:

Name:	SEVEN-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Agency:	7-Eleven, Inc., Dallas
Agency Address:	Po Box 711, Dallas, TX 75221-0711
Place/Project Type:	Other
SIC/NAICS:	Not reported
Region:	6V
Program:	NPDESWW, NPDNONMUNIPRCS
Regulatory Measure Status:	Historical
Regulatory Measure Type:	NPDES Permit
Order Number:	95-126
WDID:	6B369209001
NPDES Number:	CAG916001
Adoption Date:	11/09/1995
Effective Date:	11/09/1995
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	0.0172
Major/Minor:	Minor
Complexity:	A
TTWQ:	3
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	34.243425
Longitude:	-117.274546

CERS:

Name:	7-ELEVEN INC. #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	867
CERS ID:	10044655
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	867
Site Name:	7-ELEVEN INC. #23818
Violation Date:	09-09-2013
Citation:	HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)
Violation Description:	Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance stored in the primary containment into the secondary containment.

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Violation Notes: Returned to compliance on 09/22/2014. THE SMARTSENSOR SETUP WAS DEFICIENT AT THE TIME OF INSPECTION. NEITHER S1 NOR S2 WERE CORRECTLY PROGRAMMED FOR POSITIVE SHUTDOWN IN THEE VENT OF A NO VACUUM ALARM. REQUIREMENT: NO VAC ALARMS WERE ADDED DURING THE INSPECTION FOR S1 AND S2 UNDER THE PROGRAMMING FOR TANK 3. POSITIVE SHUTDOWN CONFIRMED; VIOLATION CORRECTED. CARE MUST BE OBSERVED DURING REPROGRAMMING THE SENSOR SET-UP FOLLOWING COLD STARTS (WHICH HAS OCCURRED AT LEAST TWICE IN THE LAST TWO YEARS).
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-19-2016
Citation: 23 CCR 16 2665 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2665
Violation Description: Failure of the overfill prevention system to meet one of the following requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.
Violation Notes: Returned to compliance on 10/04/2016. COMPLIANCE ACTIVITY (10/04/2016): FACILITY SUBMITTED COMPLIANCE DOCUMENTATION. OBSERVATION: THE 91-ATG FLOATS DETACHED FROM UNIT. COMPLIANCE REQUIREMENT: SUBMIT A COPY OF THE WORK ORDER DOCUMENTING THE REPAIR/ REPLACEMENT AND FUNCTIONALITY OF THE 91-ATG PROBE.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-19-2016
Citation: 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(i)
Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.).
Violation Notes: Returned to compliance on 10/04/2016. COMPLIANCE ACTIVITY (10/04/2016): FACILITY SUBMITTED COMPLIANCE DOCUMENTATION. OBSERVATION: THE SMART SENSOR- S6(87-FILL & 87-STP) VACUUM FAILED TO OPERATED AT THE END OF THE MONITORING CERTIFICATION. COMPLIANCE REQUIREMENT: 1) SUBMIT A COPY OF THE WORK ORDER DOCUMENTING THE REPLACEMENT/ REPAIR AND FUNCTIONALITY OF THE SMART SENSOR S6. 2) CALL OFFICE FOR A WITNESSED FUNCTIONALITY TEST OF THE S6 SENSOR.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 07-31-2019
Citation: 23 CCR 16 2715(a)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a)(2)
Violation Description: Failure to submit the Underground Storage Tank Statement of Understanding and Compliance Form.
Violation Notes: Returned to compliance on 08/06/2019. OBSERVATION: Owner/operator failed to submit the Underground Storage Tank Statement of Understanding and Compliance Form via CERS. CORRECTIVE ACTION: Submit the Underground Storage Tank Statement of Understanding and Compliance Form vis CERS and re-submit all UST documents within 30 days.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-19-2016
Citation: 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286
Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes: Returned to compliance on 10/04/2016. COMPLIANCE ACTIVITY (10/04/2016): FACILITY SUBMITTED COMPLIANCE DOCUMENTATION. OBSERVATION: THE FOLLOWING ITEMS MUST BE CORRECT IN CERS. 1) CERS DOCUMENTED THE PIPING CONTAINMENT AS " DRY". DURING THE INSPECTION THE CONTAINMENT OBSERVED TO BE UNDER VACUUM. 2) THE UNDER CONTAINMENT-SECONDARY CONTAINMENT MONITORING WAS NOTED AS "LIQUID". DURING THE INSPECTION, THE UDC'S SECONDARY CONTAINMENT WAS OBSERVED UNDER VACUUM. 3) CERS DOCUMENTED UST SYSTEM DID NOT CONTAIN A VENT PIPING SUMP. DURING THE INSPECTION, A VENT SUMP(BOX) WAS OBSERVED. COMPLIANCE REQUIREMENT: UPDATED CERS WITH THE CORRECT UST INFORMATION.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 09-02-2014
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes: Returned to compliance on 10/02/2014. CURRENT SIGNED CERTIFICATE OF FINANCIAL RESPONSIBILITY (STATE FORM) SHOWING FINANCIAL MECHANISM USED FOR UST SYSTEM IS MISSING IN CERS. ONLY A CURRENT FINANCIAL POLICY HAS BEEN UPLOADED IN CERS. PREPARE CURRENT SIGNED CERTIFICATE OF FINANCIAL RESPONSIBILITY (STATE FORM) AND SUBMIT TO THIS DEPARTMENT ON LINE IN CERS WITHIN 30 DAYS.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-19-2016

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)
Violation Description: Failure to install a line leak detector (LLD).
Violation Notes: Returned to compliance on 08/19/2016. OBSERVATION: THE 87 MECHANICAL LINE LEAK DETECTOR FAILED WHEN TESTED. COMPLIANCE MET ONSITE: TECHNICIAN REPACED AND RE-TEST 87-MECHANICAL LINE LEAK DETECTOR-PASSED
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-25-2015
Citation: HSC 6.7 25290.1(h), 25290.2(g), 25291(f), 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25290.1(h), 25290.2(g), 25291(f), 25292(e)
Violation Description: Failure to install line leak detector.
Violation Notes: Returned to compliance on 08/25/2015. 91 MECHANICAL LINE LEAK DETECTOR FAILED TO DETECT LEAK WHEN TESTED. COMPLIANCE REQUIREMENT: TECHNICIAN ADJUSTED MLLD DURING INSPECTION AND RETESTED. VIOLATION CORRECTED DURING INSPECTION.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 07-14-2021
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Description: Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.
Violation Notes: Returned to compliance on 07/14/2021. FINDINGS: S5 failed to cause high liquid alarm. OBSERVATION: Technician replaced and retested same day.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-10-2017
Citation: 23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712
Violation Description: Failure to comply with any of the applicable requirements of the permit issued for the operation of the UST system.
Violation Notes: Returned to compliance on 08/10/2017. OBSERVATION: S4 Premium Product High Liquid Alarm failed to go into alarm condition. COMPLIANCE: Repair and Retest. No permit or inspection required. Contractored replaced and retested same day. Violation corrected.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-06-2018

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Citation: HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Description: Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes: Returned to compliance on 08/08/2018. OBSERVATION: The installation dates for the (2) underground storage tanks (USTs) in the CERS submission of 05/09/2018 do not match our records. Our records indicate that the correct installation date for both tanks are 09/25/2008. CORRECTIVE ACTION: Submit the necessary updates on the California Environmental Reporting System (CERS) and return the Certificate of Compliance (CoC) attesting that all requested updates have been made.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Violation Date: 08-19-2016
Citation: HSC 6.7 29291(b) - California Health and Safety Code, Chapter 6.7, Section(s) 29291(b)
Violation Description: Failure of the UST system to be designed and constructed with a monitoring system capable of detecting the entry of the hazardous substance into the secondary containment.
Violation Notes: Returned to compliance on 08/19/2016. OBSERVATION: THE VACUUM SMART SENSORS S3, S4,S5 & S6 WERE NOT PROGRAMED FOR TURBINE SHUT DOWN. COMPLIANCE MET ON SITE: TECHNICIAN PROGRAMS S3 THROUGH S6 FOR TURBINE SHUT DOWN.
Violation Division: San Bernardino County Fire Department
Violation Program: UST
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-14-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: 7_11 UST inspection
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-15-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: HAZARDOUS WASTE INSPECTION - UST ONLY. SEE UST PR C01 FOR INSPECTION INFORMATION AND NARRATIVE.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-22-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ANNUAL UST HW HM INSPECTIONS

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 7-ELEVEN- UST WASTE INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-25-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: HAZARDOUS MATERIALS HANDLER INSPECTION UST ONLY
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-25-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: WASTE INCIDENTAL TO UST INSPECTION ONLY
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-25-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ANNUAL MONITORING CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-09-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: UST HANDLER INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-09-2013
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UST FIELD INSPECTION-ANNUAL MONITORING SYSTEM CERTIFICATION (2 TANKS-VPH SITE) W/FRANCISCO CASTRO. DRIVE TIME TO AND FROM CRESTLINE ADDED.
Eval Division: San Bernardino County Fire Department

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-22-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ANNUAL UST HW HM INSPECTIONS
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-22-2022
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ANNUAL UST HW HM INSPECTIONS
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2019
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 07-31-2019
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-06-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ANNUAL INSPECTION DURING MONITORING CERTIFICATION
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Haz Mat - no violations observed
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2017
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: VPH inspection Crestline Seven_11
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-19-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: 7-ELEVEN- UST MONITORING CERTIFICATION (VPH SYSTEM)
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-14-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 7_11 Haz Mat
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-14-2021
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 7_11 Haz Waste
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-15-2020
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: HAZARDOUS MATERIALS HANDLER INSPECTION - UST ONLY. SEE UST PR C01 FOR INSPECTION INFORMATION AND NARRATIVE.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-15-2020

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: UST ANNUAL INSPECTION WITH MONITORING SYSTEM CERTIFICAITON.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-19-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: 7-ELEVEN- UST INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-31-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-10-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: no violations observed
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-02-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: HAZARDOUS MATERIALS UST ONLY INSPECTION.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-02-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: UST ANNUAL INSPECTION WITH MONITORING SYSTEM CERTIFICATION.
Eval Division: San Bernardino County Fire Department
Eval Program: UST
Eval Source: CERS,

Enforcement Action:
Site ID: 867
Site Name: 7-ELEVEN INC. #23818
Site Address: 24156 LAKE DR
Site City: CRESTLINE

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Site Zip:	92325
Enf Action Date:	09-09-2013
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	San Bernardino County Fire Department
Enf Action Program:	UST
Enf Action Source:	CERS,

Site ID:	867
Site Name:	7-ELEVEN INC. #23818
Site Address:	24156 LAKE DR
Site City:	CRESTLINE
Site Zip:	92325
Enf Action Date:	08-25-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	San Bernardino County Fire Department
Enf Action Program:	UST
Enf Action Source:	CERS,

Site ID:	867
Site Name:	7-ELEVEN INC. #23818
Site Address:	24156 LAKE DR
Site City:	CRESTLINE
Site Zip:	92325
Enf Action Date:	08-19-2016
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	San Bernardino County Fire Department
Enf Action Program:	UST
Enf Action Source:	CERS,

Site ID:	867
Site Name:	7-ELEVEN INC. #23818
Site Address:	24156 LAKE DR
Site City:	CRESTLINE
Site Zip:	92325
Enf Action Date:	09-02-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	San Bernardino County Fire Department
Enf Action Program:	UST
Enf Action Source:	CERS,

Coordinates:

Site ID:	867
Facility Name:	7-ELEVEN INC. #23818
Env Int Type Code:	HWG
Program ID:	10044655
Coord Name:	Not reported
Ref Point Type Desc:	Unknown,
Latitude:	34.243862
Longitude:	-117.276352

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Affiliation:

Affiliation Type Desc:	Document Preparer
Entity Name:	BELSHIRE ENVIRONMENTAL SERVICES, INC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	UST Tank Owner
Entity Name:	7-ELEVEN INC.
Entity Title:	Not reported
Affiliation Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75221
Affiliation Phone:	(800) 828-0711,

Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,

Affiliation Type Desc:	Identification Signer
Entity Name:	TERESA MILES
Entity Title:	SENIOR MANAGER, ENVIRONMENTAL COMPLIANCE WEST
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Parent Corporation
Entity Name:	7-ELEVEN INC.
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	UST Permit Applicant
Entity Name:	STEPHEN BOYD
Entity Title:	REGIONAL GASOLINE ENVIRONMENTAL COMPLIANCE MANAGER
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(714) 771-5484,
Affiliation Type Desc:	UST Tank Operator
Entity Name:	T.R.A., Inc.
Entity Title:	Not reported
Affiliation Address:	24156 LAKE DR
Affiliation City:	CRESTLINE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-5224,
Affiliation Type Desc:	Environmental Contact
Entity Name:	AUSTIN HOTT
Entity Title:	Not reported
Affiliation Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	Not reported
Affiliation Zip:	75221
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	Not reported
Affiliation Zip:	75221
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	RANGI, TARLOCHAN S. & RUBY JEAN REGINA (T.R.A., Inc.)
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 338-5224,
Affiliation Type Desc:	UST Property Owner Name
Entity Name:	7-ELEVEN INC.
Entity Title:	Not reported
Affiliation Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75221
Affiliation Phone:	(800) 828-0711,
Affiliation Type Desc:	Legal Owner
Entity Name:	7-ELEVEN INC.
Entity Title:	Not reported

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Affiliation Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75221
Affiliation Phone:	(800) 828-0711,

Affiliation Type Desc:	Property Owner
Entity Name:	7-ELEVEN INC.
Entity Title:	Not reported
Affiliation Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Affiliation City:	DALLAS
Affiliation State:	TX
Affiliation Country:	United States
Affiliation Zip:	75221
Affiliation Phone:	(800) 828-0711,

Name:	7-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	630971
CERS ID:	T0607100722
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	CURTIS BRUNDAGE - SAN BERNARDINO COUNTY
Entity Title:	Not reported
Affiliation Address:	620 S. E STREET
Affiliation City:	SAN BERNARDINO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	BRIAN GREY - LAHONTAN RWQCB (REGION 6T)
Entity Title:	Not reported
Affiliation Address:	2501 LAKE TAHOE BOULEVARD
Affiliation City:	SOUTH LAKE TAHOE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Name:	SEVEN-ELEVEN STORE #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	353173
CERS ID:	256388
CERS Description:	NPDES Wastewater and Stormwater

Enforcement Action:

Site ID:	353173
Site Name:	Seven-Eleven Store #23818
Site Address:	24156 LAKE DR

SEVEN-ELEVEN STORE #23818 (Continued) **S102423521**

Site City:	CRESTLINE
Site Zip:	92325
Enf Action Date:	10-16-2002
Enf Action Type:	Oral Communication
Enf Action Description:	Oral Communication
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	UNSPEC
Enf Action Source:	CIWQS,

Site ID:	353173
Site Name:	Seven-Eleven Store #23818
Site Address:	24156 LAKE DR
Site City:	CRESTLINE
Site Zip:	92325
Enf Action Date:	06-27-2001
Enf Action Type:	Notice of Violation (Water)
Enf Action Description:	Notice of Violation Letter (Informal)
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	UNSPEC
Enf Action Source:	CIWQS,

Site ID:	353173
Site Name:	Seven-Eleven Store #23818
Site Address:	24156 LAKE DR
Site City:	CRESTLINE
Site Zip:	92325
Enf Action Date:	01-21-2000
Enf Action Type:	Oral Communication
Enf Action Description:	Oral Communication
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	UNSPEC
Enf Action Source:	CIWQS,

B17 **7-ELEVEN STORE #23818** **LUST** **S105502107**
West **24156 LAKE DR** **Cortese** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.037 mi.
195 ft. **Site 7 of 11 in cluster B**

Relative:
Higher

Actual:
4564 ft.

LUST Region 6V:

Name:	7-ELEVEN STORE #23818
Address:	24156 LAKE DR
City:	CRESTLINE
Region:	6V
Case Number:	6B3600237T
Leak Record:	12/28/1990
Report Date:	12/6/1990
Reported By Address:	Not reported
Responsible Party:	THE SOUTHLAND CORPORATION
Operator:	SCOTT AND DIANE PIERCE
Cross Street:	Not reported
Local Agency:	36000L
Regional Board:	6V
Chemical:	Gasoline

7-ELEVEN STORE #23818 (Continued) **S105502107**

Case Type:	Drinking Water Aquifer affected
Funding:	Not reported
Enforce Type:	SEL
How Found:	Not reported
How Stopped:	Not reported
Cause of Leak:	Not reported
Leak Source:	Not reported
Global ID:	T0607100722
Stop Date:	Not reported
Leak Confirm:	12/6/1990
Submit Workplan:	12/6/1990
Prelim Assess:	1/30/1991
Pollution Char:	1/30/1991
Remed Plan:	6/10/1992
Remed Action:	10/20/2003
Monitoring:	1/23/2004
Close Date:	Not reported
Discovered:	Not reported
Enforce Date:	1/1/1965
Review Date:	1/7/2002
GW Qualifier:	=
Soil Qualifier:	=
MTBE class:	A
Max MTBE Grnd Wtr:	31000
Max MTBE Soil:	0
MTBE Counts:	2
MTBE Fuel:	1
MTBE Tested:	YES
Organization Name:	Not reported
Status:	Post remedial action monitoring
Contact:	Not reported
Interim Action:	No
Pilot Program:	LUST
Lat/Long:	34.2419 / -117.2847
Staff Initials:	DEF
Local Agency Staff:	CB5
Lead Agency:	Regional Board
Summary:	IN 88 & 90 PSI INDIC SOIL CONTAM. SA IN 91 INDIC GW CONTAM. SITE ASSMNT HAS BEEN ADEQUATLY COMPLETED AT THIS TIME. REMEDCONSISTS OF PUMP & TREAT & SOIL EXCAVATION.3/96 799 TONS SOIL REMVD DURING UST UPGRADE. DTW 0 - 10 FT BGS
Basin Number:	UNNAMED FORMATION (6
Beneficial:	Not reported
Priority:	Not reported
UST Cleanup Fund ID:	Not reported
Suspended:	Not reported
Local Case Number:	90174
Amount:	Not reported
Abate Method:	Not reported
Water System:	Not reported
Well Name:	Not reported
Distance:	1113
Wst Disch Reqrmnt Global ID:	Not reported
Wst Disch Reqrmnt Name:	Not reported

CORTESE:
Name: 7-ELEVEN STORE #23818

7-ELEVEN STORE #23818 (Continued) **S105502107**

Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100722
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

B18 **7-ELEVEN STORE #23818** **HIST UST** **1000282057**
West **24156 LAKE DRIVE** **Notify 65** **N/A**
< 1/8 **CRESTLINE, CA 92325**
0.037 mi.
195 ft. **Site 8 of 11 in cluster B**

Relative:
Higher

Actual:
4564 ft.

HIST UST:

Name:	7-ELEVEN STORE 23818 (2131)
Address:	24156 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92404
File Number:	0002a7ae
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002a7ae.pdf
Region:	STATE
Facility ID:	00000012380
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	SCOTT PEARCE
Telephone:	7148620380
Owner Name:	THE SOUTHLAND CORPORATION
Owner Address:	1240 S. STATE COLLEGE BLVD., S
Owner City,St,Zip:	ANAHEIM, CA 92806
Total Tanks:	0003
Tank Num:	001
Container Num:	01
Year Installed:	1982
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	02

7-ELEVEN STORE #23818 (Continued) **1000282057**

Year Installed:	1982
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10

Tank Num:	003
Container Num:	03
Year Installed:	1982
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	06
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor, 10

Click here for Geo Tracker PDF:

NOTIFY 65:

Name:	7-ELEVEN STORE #23818
Address:	24156 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
Date Reported:	Not reported
Staff Initials:	Not reported
Board File Number:	Not reported
Facility Type:	Not reported
Discharge Date:	Not reported
Issue Date:	Not reported
Incident Description:	Not reported
Global ID:	Not reported
Status:	Not reported

B19 **SEVEN-11 STORE #23818** **SWEEPS UST** **U003941606**
West **24156 LAKE DR** **N/A**
< 1/8 **CRESTLINE, CA 92404**
0.037 mi.
195 ft. **Site 9 of 11 in cluster B**

Relative:
Higher

Actual:
4564 ft.

SWEEPS UST:

Name:	SEVEN-11 STORE #23818
Address:	24156 LAKE DR
City:	CRESTLINE
Status:	Active
Comp Number:	12380
Number:	9
Board Of Equalization:	44-000182
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	36-000-012380-000001
Tank Status:	A
Capacity:	12000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED

SEVEN-11 STORE #23818 (Continued) **U003941606**

Number Of Tanks: 3

Name: SEVEN-11 STORE #23818
Address: 24156 LAKE DR
City: CRESTLINE
Status: Active
Comp Number: 12380
Number: 9
Board Of Equalization: 44-000182
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 36-000-012380-000002
Tank Status: A
Capacity: 12000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Name: SEVEN-11 STORE #23818
Address: 24156 LAKE DR
City: CRESTLINE
Status: Active
Comp Number: 12380
Number: 9
Board Of Equalization: 44-000182
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 02-29-88
Owner Tank Id: 3
SWRCB Tank Id: 36-000-012380-000003
Tank Status: A
Capacity: 12000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: GASHOL
Number Of Tanks: Not reported

B20 **7-ELEVEN STORE 23818** **RCRA NonGen / NLR** **1024783055**
West **24156 LAKE DR** **CAD981464969**
< 1/8 **CRESTLINE, CA 92404**
0.037 mi.
195 ft. **Site 10 of 11 in cluster B**

Relative:
Higher

Actual:
4564 ft.

RCRA Listings:

Date Form Received by Agency:	19870410
Handler Name:	7-Eleven Store 23818
Handler Address:	24156 LAKE DR
Handler City,State,Zip:	CRESTLINE, CA 92404-0000
EPA ID:	CAD981464969
Contact Name:	JOSE RIOS
Contact Address:	1722 ROUTH STREET
Contact City,State,Zip:	DALLAS, TX 75201
Contact Telephone:	972-828-6592

7-ELEVEN STORE 23818 (Continued) **1024783055**

Contact Fax:	972-828-1095
Contact Email:	JOSE.RIOS@7-11.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 711
Mailing City,State,Zip:	DALLAS, TX 75221
Owner Name:	7-Eleven Inc.
Owner Type:	Other
Operator Name:	Jose Rios
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No

7-ELEVEN STORE 23818 (Continued) **1024783055**

Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: 7-ELEVEN INC.
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 711
Owner/Operator City,State,Zip: DALLAS, TX 75221
Owner/Operator Telephone: 714-771-5484
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: JOSE RIOS
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 1722 ROUTH STREET
Owner/Operator City,State,Zip: DALLAS, TX 75201
Owner/Operator Telephone: 972-828-6592
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19870410
Handler Name: 7-ELEVEN STORE 23818
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44719
NAICS Description: OTHER GASOLINE STATIONS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B21 West < 1/8 0.037 mi. 195 ft. | **7-ELEVEN INC. #23818**
24156 LAKE DR
CRESTLINE, CA 92325

Site 11 of 11 in cluster B | **UST** | **U004353046**
N/A

Relative: Higher

Actual: 4564 ft.

UST:

Name:	7-ELEVEN INC. #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Facility ID:	FA0006123
Permitting Agency:	San Bernardino County Fire Department
CERSID:	10044655
Latitude:	34.2438660
Longitude:	-117.276367
Owner type:	Non-Government
Facility type:	Motor Vehicle Fueling
Num of inuse ust:	Not reported
Num of closed ust:	0
Num of oos ust:	0
Epa region:	9
Tribal lands:	No
Tank owner name:	7-ELEVEN INC.
Tank owner mailing address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Tank owner mailing city:	DALLAS
Tank owner mailing zip:	75221
Tank owner mailing state:	TX
Tank operator name:	TARLOCHAN S. RANGI & RUBY JEAN REGINA RANGI
Tank operator mailing address:	24156 LAKE DR
Tank operator mailing city:	CRESTLINE
Tank operator mailing zip:	92325
Tank operator mailing state:	CA
Tankidnumber:	1
Tank status:	Confirmed/Updated Information
Tank configuration:	Stand Alone Tank
Tank closure date:	Not reported
Tank installation date:	9/25/2008 12:00:00 AM
Tank num of compartments:	1
Tank contents:	Regular Unleaded
Tank capacity gallons:	12000
Tank type:	Double Wall
Tank pc construction:	Fiberglass
Tank pwpiping construction:	Fiberglass
Tank piping type:	Pressure
Tank piping construction:	Double Walled
Tank sacrificial anode:	No
Tank cp impressed current:	No
Tank cp shutoff:	Yes
Tank alarms:	No
Tank ball float:	No
Tank spill bucket:	Yes

Name:	7-ELEVEN INC. #23818
Address:	24156 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Facility ID:	FA0006123
Permitting Agency:	San Bernardino County Fire Department
CERSID:	10044655
Latitude:	34.2438660

7-ELEVEN INC. #23818 (Continued) **U004353046**

Longitude:	-117.276367
Owner type:	Non-Government
Facility type:	Motor Vehicle Fueling
Num of inuse ust:	Not reported
Num of closed ust:	0
Num of oos ust:	0
Epa region:	9
Tribal lands:	No
Tank owner name:	7-ELEVEN INC.
Tank owner mailing address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Tank owner mailing city:	DALLAS
Tank owner mailing zip:	75221
Tank owner mailing state:	TX
Tank operator name:	TARLOCHAN S. RANGI & RUBY JEAN REGINA RANGI
Tank operator mailing address:	24156 LAKE DR
Tank operator mailing city:	CRESTLINE
Tank operator mailing zip:	92325
Tank operator mailing state:	CA
Tankidnumber:	2
Tank status:	Confirmed/Updated Information
Tank configuration:	Stand Alone Tank
Tank closure date:	Not reported
Tank installation date:	9/25/2008 12:00:00 AM
Tank num of compartments:	1
Tank contents:	Premium Unleaded
Tank capacity gallons:	10000
Tank type:	Double Wall
Tank pc construction:	Fiberglass
Tank pwpiping construction:	Fiberglass
Tank piping type:	Pressure
Tank piping construction:	Double Walled
Tank sacrificial anode:	No
Tank cp impressed current:	No
Tank cp shutoff:	Yes
Tank alarms:	No
Tank ball float:	No
Tank spill bucket:	Yes

22
South
< 1/8
0.043 mi.
226 ft.

TED BARTSCHERER
24458 HORST DRIVE
CRESTLINE, CA 92325

RCRA NonGen / NLR **1027081597**
CAC003153673

Relative:
Higher

Actual:
4604 ft.

RCRA Listings:

Date Form Received by Agency:	20211221
Handler Name:	Ted Bartscherer
Handler Address:	24458 HORST DRIVE
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003153673
Contact Name:	TED BARTSCHERER
Contact Address:	24458 HORST DRIVE
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	626-375-0772
Contact Fax:	Not reported
Contact Email:	LBARTSCHERER@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09

TED BARTSCHERER (Continued) **1027081597**

Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	24458 HORST DRIVE
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Ted Bartscherer
Owner Type:	Other
Operator Name:	Ted Bartscherer
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20211221
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

TED BARTSCHERER (Continued) **1027081597**

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name: TED BARTSCHERER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24458 HORST DRIVE
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	626-375-0772
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: TED BARTSCHERER	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24458 HORST DRIVE
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	626-375-0772
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20211221
Handler Name: TED BARTSCHERER	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

23 SSE < 1/8 0.047 mi. 247 ft. | **ELISA F. SALOMONE**
24514 HORST CT
CRESTLINE, CA 92325 | **RCRA NonGen / NLR** | **1026719138**
CAC003107768

Relative: Higher

Actual: 4599 ft.

RCRA Listings:

Date Form Received by Agency:	20210301
Handler Name:	Elisa F. Salomone
Handler Address:	24514 HORST CT
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003107768
Contact Name:	ELISA F. SALOMONE
Contact Address:	24514 HORST CT
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	323-313-4911
Contact Fax:	Not reported
Contact Email:	INFO@SENSITIVE-ENVIRONMENTAL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	957 N. SCOTT AVE
Mailing City,State,Zip:	MONTEBELLO, CA 90640
Owner Name:	Elisa F. Salomone
Owner Type:	Other
Operator Name:	Elisa F. Salomone
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

ELISA F. SALOMONE (Continued) **1026719138**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210312
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ELISA F. SALOMONE	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24514 HORST CT
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	323-313-4911
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ELISA F. SALOMONE	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	957 N. SCOTT AVE
Owner/Operator City,State,Zip:	MONTEBELLO, CA 90640
Owner/Operator Telephone:	323-313-4911
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20210301
Handler Name: ELISA F. SALOMONE	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

ELISA F. SALOMONE (Continued) **1026719138**

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C24 West < 1/8 0.079 mi. 415 ft. **MTN AREA REGIONAL TRANSIT AUTHORITY**
621 FOREST SHADE DR
CRESTLINE, CA 92325
Site 1 of 5 in cluster C

CERS HAZ WASTE **S104396262**
San Bern. Co. Permit **N/A**
CERS

Relative: Higher
Actual: 4561 ft.

CERS HAZ WASTE:
Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Address: 621 FOREST SHADE DR
City,State,Zip: CRESTLINE, CA 92325
Site ID: 50602
CERS ID: 10041769
CERS Description: Hazardous Waste Generator

San Bern. Co. Permit:
Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Address: 621 FOREST SHADE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0004595
Owner: M.A.R.T.A.
Permit Number: PT0000167
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 04/30/2024

Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Address: 621 FOREST SHADE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0004595
Owner: M.A.R.T.A.
Permit Number: PT0000166
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status: ACTIVE
Expiration Date: 04/30/2024

CERS:
Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Address: 621 FOREST SHADE DR
City,State,Zip: CRESTLINE, CA 92325
Site ID: 50602
CERS ID: 10041769
CERS Description: Chemical Storage Facilities

MTN AREA REGIONAL TRANSIT AUTHORITY (Continued) **S104396262**

Violations:

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	04-05-2018
Citation:	HSC 6.5 25160.2 - California Health and Safety Code, Chapter 6.5, Section(s) 25160.2
Violation Description:	Failure of a generator of hazardous waste that meets the conditions to be transported on a consolidated manifest to comply with one or more of the required consolidated manifesting procedures and retain copies of receipts for three years.
Violation Notes:	Returned to compliance on 09/05/2018. OBSERVATION: Owner/Operator failed to comply with maintaining copies of manifests for three years. CORRECTIVE ACTION: Ensure that all wastes transported on a consolidated manifest meet all consolidated manifest requirements, and maintain copies of manifests for three years.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	04-05-2018
Citation:	22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Description:	Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.
Violation Notes:	Returned to compliance on 09/05/2018. OBSERVATION: Uniform Hazardous Waste Manifests for waste coolant were not available at the time of inspection. CORRECTIVE ACTION: Locate a copy of all manifests for waste coolant and submit copies to the CUPA.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	04-05-2018
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 09/05/2018. OBSERVATION: 55-gallon drum of used oil located in the hazardous waste storage area was observed without the following information on the label: Physical State, Hazardous Properties, and Accumulation Start Date. CORRECTIVE ACTION: Submit photos to the CUPA demonstrating that the container listed above has been properly labeled.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

MTN AREA REGIONAL TRANSIT AUTHORITY (Continued) **S104396262**

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	07-08-2021
Citation:	HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description:	Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes:	Returned to compliance on 07/08/2021. OBSERVATION: At the time of the inspection (2) 6.5-Gallon containers of drained used oil filters were observed with a missing label. The used oil filter violation was corrected on site at the time of the inspection.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	04-05-2018
Citation:	40 CFR 1 265.173 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.173
Violation Description:	Failure to meet the following container management requirements: (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
Violation Notes:	Returned to compliance on 09/05/2018. OBSERVATION: 55-galllon drum of waste coolant located in the hazardous waste storage area was observed open. CORRECTIVE ACTION: Submit photos to the CUPA demonstrating that the container listed above has been properly closed.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	09-02-2014
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 09/02/2014. DRAINED USED OIL FILTER MISSING ACCUMULATION START DATE. OPERATOR ADDED THE ACCUMULATION START TO THE DRUM. VIOLATION CORRECTED AT THE TIME OF THE INSPECTION.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,

Site ID:	50602
Site Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date:	07-08-2021
Citation:	HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	OBSERVATION: At the time of the inspection (1) 55-Gallon drum of 5w20

MTN AREA REGIONAL TRANSIT AUTHORITY (Continued) **S104396262**

motor oil and (9) 1-Quart containers of 5w20 motor oil were observed on site which had not been reported via CERS. In addition, all inventory items submitted via CERS require revision as they were submitted with obsolete federal hazard categories. CORRECTIVE ACTION: Submit an accurate and complete hazardous materials inventory via CERS. Your CERS ID is 10041769.

Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 50602
Site Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Violation Date: 07-08-2021
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: OBSERVATION: At the time of the inspection a complete business plan had not been reviewed and certified via CERS on 2/25/2019. CORRECTIVE ACTION: Review and certify a complete business plan via CERS. Your CERS ID number is 10041769.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-05-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-08-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 04-05-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-08-2021
Violations Found: Yes

MTN AREA REGIONAL TRANSIT AUTHORITY (Continued) **S104396262**

Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-02-2014
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-02-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: ROUTINE INSPECTION
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 50602
Site Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Site Address: 621 FOREST SHADE DR
Site City: CRESTLINE
Site Zip: 92325
Enf Action Date: 09-02-2014
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Coordinates:
Site ID: 50602
Facility Name: MTN AREA REGIONAL TRANSIT AUTHORITY
Env Int Type Code: HWG
Program ID: 10041769
Coord Name: Not reported
Ref Point Type Desc: Unknown,
Latitude: 34.242123
Longitude: -117.277657

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported

MTN AREA REGIONAL TRANSIT AUTHORITY (Continued) **S104396262**

Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Sandy Benson
Entity Title:	Not reported
Affiliation Address:	PO Box 2409
Affiliation City:	CRESTLINE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO BOX 2409
Affiliation City:	CRESTLINE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	M.A.R.T.A.
Entity Title:	Not reported
Affiliation Address:	P O BOX 1501
Affiliation City:	BIG BEAR LAKE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92315
Affiliation Phone:	(909) 338-1113,
Affiliation Type Desc:	Operator
Entity Name:	Sandy Benson
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 586-5073,
Affiliation Type Desc:	Parent Corporation
Entity Name:	MTN AREA REGIONAL TRANSIT AUTHORITY
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

C25 West < 1/8 0.079 mi. 415 ft. | **MOUNTAIN AREA REGIONAL TRANSIT AUTHORITY DBA MARTA**
621 FOREST SHADE DR
CRESTLINE, CA 92325 | **RCRA NonGen / NLR** | **1024807342**
CAL000273939

Site 2 of 5 in cluster C

Relative: Higher

Actual: 4561 ft.

RCRA Listings:

Date Form Received by Agency:	20030818
Handler Name:	Mountain Area Regional Transit Authority Dba Marta
Handler Address:	621 FOREST SHADE DR
Handler City,State,Zip:	CRESTLINE, CA 92325-0000
EPA ID:	CAL000273939
Contact Name:	SANDY BENSON
Contact Address:	PO BOX 1501
Contact City,State,Zip:	BIG BEAR LAKE, CA 92315
Contact Telephone:	909-963-7201
Contact Fax:	909-878-5207
Contact Email:	SBENSON@MOUNTAINTRANSIT.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 1501
Mailing City,State,Zip:	BIG BEAR LAKE, CA 92315-0000
Owner Name:	Mountain Area Regional Transit Auth
Owner Type:	Other
Operator Name:	Sandy Benson
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

MOUNTAIN AREA REGIONAL TRANSIT AUTHORITY DBA MARTA (Continued) **1024807342**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: SANDY BENSON	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 1501
Owner/Operator City,State,Zip:	BIG BEAR LAKE, CA 92315
Owner/Operator Telephone:	909-963-7201
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: MOUNTAIN AREA REGIONAL TRANSIT AUTH	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 1501
Owner/Operator City,State,Zip:	BIG BEAR LAKE, CA 92315-0000
Owner/Operator Telephone:	909-963-7201
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20030818
Handler Name:	MOUNTAIN AREA REGIONAL TRANSIT AUTHORITY DBA MARTA
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

MOUNTAIN AREA REGIONAL TRANSIT AUTHORITY DBA MARTA (Continued) **1024807342**

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES
NAICS Code:	811111
NAICS Description:	GENERAL AUTOMOTIVE REPAIR

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

C26 **LEE'S AUTOMOTIVE** **RCRA-SQG** **1000594314**
West **621 FOREST SHADE RD** **FINDS** **CAD983581331**
< 1/8 **CRESTLINE, CA 92325** **ECHO**
0.079 mi.
415 ft. **Site 3 of 5 in cluster C**

Relative:
Higher

Actual:
4561 ft.

RCRA Listings:

Date Form Received by Agency:	19910506
Handler Name:	Lee'S Automotive
Handler Address:	621 FOREST SHADE RD
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAD983581331
Contact Name:	SCOTT BUCKLEY
Contact Address:	621 FOREST SHADE RD
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	415-555-1212
Contact Fax:	Not reported
Contact Email:	Not reported
Contact Title:	Not reported
EPA Region:	09
Land Type:	Other
Federal Waste Generator Description:	Small Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Ca
State District:	4
Mailing Address:	P O BOX 1637
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Haywood Lee Kersey
Owner Type:	Private
Operator Name:	Not Required
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

LEE'S AUTOMOTIVE (Continued) **1000594314**

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	NN
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: NOT REQUIRED	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: HAYWOOD LEE KERSEY	
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	NOT REQUIRED
Owner/Operator City,State,Zip:	NOT REQUIRED, ME 99999
Owner/Operator Telephone:	415-555-1212
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported

LEE'S AUTOMOTIVE (Continued) **1000594314**

Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19910506
Handler Name: LEE'S AUTOMOTIVE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ca
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 44131
NAICS Description: AUTOMOTIVE PARTS AND ACCESSORIES STORES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002843585

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000594314
Registry ID: 110002843585
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002843585
Name: LEE'S AUTOMOTIVE
Address: 621 FOREST SHADE RD
City,State,Zip: CRESTLINE, CA 92325

27 WSW < 1/8 0.086 mi. 455 ft. | **KEETON SINGLE FAMILY DWELLING**
24200 HORST DR.
CRESTLINE, CA 92325 | **RCRA NonGen / NLR** | **1024777660**
CAC002997603

Relative: Higher

Actual: 4644 ft.

RCRA Listings:

Date Form Received by Agency:	20190122
Handler Name:	Keeton Single Family Dwelling
Handler Address:	24200 HORST DR.
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC002997603
Contact Name:	MERRI KEETON
Contact Address:	24200 HORST DR.
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	708-628-4416
Contact Fax:	Not reported
Contact Email:	AMBERG_ICI@YAHOO.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	24200 HORST DR.
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Merri Keeton
Owner Type:	Other
Operator Name:	Merri Keeton
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No

KEETON SINGLE FAMILY DWELLING (Continued) **1024777660**

Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190222
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: MERRI KEETON	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24200 HORST DR.
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	708-628-4416
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: MERRI KEETON	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	24200 HORST DR.
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	708-628-4416
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20190122
Handler Name:	KEETON SINGLE FAMILY DWELLING
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

KEETON SINGLE FAMILY DWELLING (Continued) **1024777660**

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C28 West < 1/8 0.103 mi. 542 ft. **STEVE'S CYLINDER HEAD/AUTO REPAIR** **San Bern. Co. Permit** **S104770693**
638 FOREST SHADE **N/A**
CRESTLINE, CA 92325

Site 4 of 5 in cluster C

Relative: Higher
Actual: 4570 ft.

San Bern. Co. Permit:
Name: STEVE'S CYLINDER HEAD/AUTO REPAIR
Address: 638 FOREST SHADE
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006467
Owner: TOROK, STEVE & TRACY
Permit Number: PT0013066
Permit Category: SPECIAL HANDLER
Facility Status: INACTIVE
Expiration Date: 05/31/2007

Name: STEVE'S CYLINDER HEAD/AUTO REPAIR
Address: 638 FOREST SHADE
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0006467
Owner: TOROK, STEVE & TRACY
Permit Number: PT0000265
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 05/31/2007

C29 West < 1/8 0.111 mi. 586 ft. **WALTER D BRAMSON MD A PROFESSIONAL CORP** **RCRA NonGen / NLR** **1024867968**
580 FOREST SHADE RD UNIT 1 **CAL000436569**
CRESTLINE, CA 92325

Site 5 of 5 in cluster C

Relative: Higher
Actual: 4560 ft.

RCRA Listings:
Date Form Received by Agency: 20180525
Handler Name: Walter D Bramson Md A Professional Corp
Handler Address: 580 FOREST SHADE RD UNIT 1
Handler City,State,Zip: CRESTLINE, CA 92325
EPA ID: CAL000436569
Contact Name: KRISTIN HENDERSON
Contact Address: PO BOX 3816
Contact City,State,Zip: CRESTLINE, CA 92325

WALTER D BRAMSON MD A PROFESSIONAL CORP (Continued) **1024867968**

Contact Telephone:	909-338-1851
Contact Fax:	909-338-6381
Contact Email:	DRWALTERBRAMSON@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 3816
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Walter D Bramson A Prof Corp
Owner Type:	Other
Operator Name:	Kristin Henderson
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180907
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No

WALTER D BRAMSON MD A PROFESSIONAL CORP (Continued) **1024867968**

Manifest Broker: No
Sub-Part P Indicator: No

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: KRISTIN HENDERSON
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 3816
Owner/Operator City,State,Zip: CRESTLINE, CA 92325
Owner/Operator Telephone: 909-338-1851
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: WALTER D BRAMSON A PROF CORP
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 498 DART CANYON
Owner/Operator City,State,Zip: CRESTLINE, CA 92325
Owner/Operator Telephone: 909-338-1851
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20180525
Handler Name: WALTER D BRAMSON MD A PROFESSIONAL CORP
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 621493
NAICS Description: FREESTANDING AMBULATORY SURGICAL AND EMERGENCY CENTERS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

D30 West < 1/8 0.116 mi. 615 ft. | **CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAG**
536 FOREST SHADE RD
CRESTLINE, CA 92325 | **San Bern. Co. Permit** | **S108985806**
CERS | **N/A**

Site 1 of 6 in cluster D

Relative: Higher

Actual: 4560 ft.

San Bern. Co. Permit:

Name:	CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAGE LIFT STATION
Address:	536 FOREST SHADE RD
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0011397
Owner:	Crestline Sanitation District
Permit Number:	PT0019725
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL
Facility Status:	ACTIVE
Expiration Date:	02/28/2024

CERS:

Name:	FOREST SHADE SEWAGE LIFT STATION
Address:	536 FOREST SHADE ROAD
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	468545
CERS ID:	110000526048
CERS Description:	US EPA Air Emission Inventory System (EIS)

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	STEVE ECONOMON
Entity Title:	UTILITY PLANT SUPERVISOR
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	DAVID K TOMPKINS
Entity Title:	ASSISTANT DIRECTOR OF PUBLIC WORKS
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	TONY PIRONDINI
Entity Title:	ENVIRONMENTAL CONTACT
Affiliation Address:	POBOX 220
Affiliation City:	ELMIRA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Facility Owner
Entity Name:	CITY OF VACAVILLE

CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAGE LIFT STA (Continued) **S108985806**

Entity Title:	OWNER
Affiliation Address:	POBOX 220
Affiliation City:	ELMIRA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	ROYCE CUNNINGHAM
Entity Title:	INTERIM DIRECTOR OF UTILITIES
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Jeff Cooley
Entity Title:	Utilities Operations Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	CITY OF VACAVILLE
Entity Title:	OPERATOR
Affiliation Address:	6040 VACA STATION ROAD
Affiliation City:	ELMIRA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Name:	CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAGE LIFT STATION
Address:	536 FOREST SHADE ROAD
City,State,Zip:	CRESTLINE, CA 92325
Site ID:	31068
CERS ID:	10052770
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	31068
Site Name:	Crestline Sanitation District - Forest Shade Sewage Lift Station
Violation Date:	05-26-2020
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 05/26/2020. The Emergency Reponse Plan submitted via CERS on 12/27/2019, was submitted incomplete. Violation corrected on site; operator submitted a complete Emergency Response

CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAGE LIFT STA (Continued) **S108985806**

Plan via CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-26-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION FOR FOREST SHADE SEWAGE LIFT STATION.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: routine inspeciton
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Environmental Contact
Entity Name: Ron Scriven
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92325
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address

CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAGE LIFT STA (Continued) **S108985806**

Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,

Affiliation Type Desc:	Operator
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 338-1751,

Affiliation Type Desc:	Document Preparer
Entity Name:	Ron Scriven
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-1751,

Affiliation Type Desc:	Property Owner
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-1751,

Affiliation Type Desc:	Identification Signer
Entity Name:	Ron Scriven
Entity Title:	General Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

CRESTLINE SANITATION DISTRICT - FOREST SHADE SEWAGE LIFT STA (Continued) **S108985806**

Affiliation Type Desc:	Parent Corporation
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

D31 **FOREST SHADE SEWAGE LIFT STATION** **FINDS** **1018319158**
West **536 FOREST SHADE ROAD** **ECHO** **N/A**
< 1/8 **CRESTLINE, CA 92325** **PFAS ECHO**
0.116 mi.
615 ft. **Site 2 of 6 in cluster D**

Relative:
Higher

Actual:
4560 ft.

FINDS:
Registry ID: 110000526048

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The Risk Management Plan (RMP) database stores the risk management plans reported by companies that handle, manufacture, use, or store certain flammable or toxic substances, as required under section 112(r) of the Clean Air Act (CAA).
THE EMISSION INVENTORY SYSTEM (EIS) MAINTAINS AN INVENTORY OF LARGE STATIONARY SOURCES AND VOLUNTARILY-REPORTED SMALLER SOURCES OF AIR POINT POLLUTANT EMITTERS. IT CONTAINS INFORMATION ABOUT FACILITY SITES AND THEIR PHYSICAL LOCATION, EMISSIONS UNITS, EMISSIONS PROCESSES, RELEASE POINTS, CONTROL APPROACHES, AND REGULATIONS. FACILITY INVENTORY DATA ARE KEPT SEPARATE FROM THE EMISSIONS DATA AND HAVE STABLE IDENTIFIERS TO IMPROVE CONTINUITY FROM YEAR TO YEAR AND TO HELP IDENTIFY DUPLICATE OR MISSING FACILITIES
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS),EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), andToxic Release Inventory (TRI).
The National Pollutant Discharge Elimination System (NPDES) module of the Integrated Compliance Information System (ICIS). Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

FOREST SHADE SEWAGE LIFT STATION (Continued) **1018319158**

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1018319158
Registry ID:	110000526048
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110000526048
Name:	FOREST SHADE SEWAGE LIFT STATION
Address:	536 FOREST SHADE ROAD
City,State,Zip:	CRESTLINE, CA 92325

PFAS ECHO:

Name:	FOREST SHADE SEWAGE LIFT STATION
Address:	Not reported
City,State,Zip:	CRESTLINE, CA
Latitude:	34.243076
Longitude:	-117.278006
Count:	1
County:	SAN BERNARDINO COUNTY
Status:	Active
Region:	09
Industry:	Waste Management
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110000526048
Facility Percent Minority:	24.283
Facility Derived Tribes:	San Manuel Band of Mission Indians, California - 6.2 mile(s), San Manuel Band of Mission Indians, California - 6.5 mile(s)
Facility Population:	455.71
EPA Programs:	CWA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06071
Facility Indian Country Flag:	N
Facility Collection Method:	ADDRESS MATCHING-HOUSE NUMBER
Facility Derived HUC:	18090208
Facility Derived WBD:	180902080201
Facility Derived CD113:	08
Facility Derived CB2010:	060710108042013
Facility Major Flag:	Y
Facility Active Flag:	Y
Facility Inspection Count:	3
Facility Date Last Inspection:	12/12/2022
Facility Days Last Inspection:	201
Facility Informal Count:	9
Facility Date Last Informal Action:	2/4/2022
Facility Formal Action Count:	2
Facility Date Last Formal Action:	8/3/2021
Facility Total Penalties:	3,000
Facility Penalty Count:	1
Facility Date Last Penalty:	8/3/2021
Facility Last Penalty AMT:	3,000
Facility QTRS With NC:	3
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	Y

FOREST SHADE SEWAGE LIFT STATION (Continued) **1018319158**

SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDS:	CA0077691
CWA Permit Types:	Major
CWA NAICS:	-
CWA SICS:	4952
RCRA IDS:	-
RCRA Permit Types:	-
RCRA NAICS:	-
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	N
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.278006,%22y%22:34.243076,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

D32 **MICK HILL ENTERPRISES** **HAZNET** **S105047422**
West **24057 LAKE DR** **San Bern. Co. Permit** **N/A**
1/8-1/4 **CRESTLINE, CA 92325** **HWTS**
0.133 mi.
704 ft. **Site 3 of 6 in cluster D**

Relative:
Higher

Actual:
4563 ft.

HAZNET:

Name:	MICK HILL ENTERPRISES
Address:	24057 LAKE DRIVE
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 92325
Contact:	MICHAEL HILL OR RICHARD SCOTT
Telephone:	9093385432
Mailing Name:	Not reported
Mailing Address:	PO BOX 9208
Year:	2013
Gepaid:	CAC002742362
TSD EPA ID:	CAT080013352
CA Waste Code:	241 - Tank bottom waste
Disposal Method:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Tons:	14.178

Additional Info:

MICK HILL ENTERPRISES (Continued) **S105047422**

Year:	2013
Gen EPA ID:	CAC002742362
Shipment Date:	20131022
Creation Date:	12/17/2013 22:15:06
Receipt Date:	20131024
Manifest ID:	004643201FLE
Trans EPA ID:	CAT080016116
Trans Name:	NIETO AND SONS TRUCKING INC
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAT080013352
Trans Name:	DEMENNO KERDOON
TSDF Alt EPA ID:	Not reported
TSDF Alt Name:	Not reported
Waste Code Description:	241 - Tank bottom waste 251 Still bottoms with halogenated organics
RCRA Code:	Not reported
Meth Code:	H039 - Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect
Quantity Tons:	14.178
Waste Quantity:	3400
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

San Bern. Co. Permit:

Name:	MICK HILL ENTERPRISES
Address:	24057 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0002844
Owner:	THOMAS MICHAEL HILL
Permit Number:	PT0001837
Permit Category:	HAZMAT HANDLER, UST ONLY - PER YEAR
Facility Status:	INACTIVE
Expiration Date:	10/31/2013
Name:	MICK HILL ENTERPRISES
Address:	24057 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0002844
Owner:	THOMAS MICHAEL HILL
Permit Number:	PT0012371
Permit Category:	REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status:	INACTIVE
Expiration Date:	10/31/2013
Name:	MICK HILL ENTERPRISES
Address:	24057 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0002844
Owner:	THOMAS MICHAEL HILL

MICK HILL ENTERPRISES (Continued) **S105047422**

Permit Number: PT0012372
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2013

Name: MICK HILL ENTERPRISES
Address: 24057 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002844
Owner: THOMAS MICHAEL HILL
Permit Number: PT0012373
Permit Category: REGULAR UST ANNUAL INSPECTION (PER TANK)
Facility Status: INACTIVE
Expiration Date: 10/31/2013

HWTS:

Name:	MICK HILL ENTERPRISES
Address:	24057 LAKE DRIVE
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC002742362
Inactive Date:	11/29/2013
Create Date:	08/30/2013
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 9208
Mailing Address 2:	Not reported
Mailing City,State,Zip:	CEDARPINES PARK, CA 923229208
Owner Name:	MICHAEL T. HILL & ERIC STONE
Owner Address:	PO BOX 9208
Owner Address 2:	Not reported
Owner City,State,Zip:	CEDARPINES PARK, CA 923229208
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	MICHAEL HILL OR RICHARD SCOTT
Contact Address:	PO BOX 9208
Contact Address 2:	Not reported
City,State,Zip:	CEDARPINES PARK, CA 923229208
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	34.2433
Longitude:	-117.27835

NAICS:

EPA ID:	CAC002742362
Create Date:	2013-08-30 11:47:22.473
NAICS Code:	23332
NAICS Description:	Commercial and Institutional Building Construction
Issued EPA ID Date:	2013-08-30 11:47:22.48000
Inactive Date:	2013-11-29 11:47:22.47000
Facility Name:	MICK HILL ENTERPRISES
Facility Address:	24057 LAKE DRIVE
Facility Address 2:	Not reported

MICK HILL ENTERPRISES (Continued) **S105047422**

Facility City:	CRESTLINE
Facility County:	Not reported
Facility State:	CA
Facility Zip:	92325

D33 West 1/8-1/4 0.133 mi. 704 ft. **CELEBRATION CENTRE NON PROFIT ORG** **RCRA NonGen / NLR** **1025881010**
PFAS ECHO **CAP000210880**

CRESTLINE, CA

Site 4 of 6 in cluster D

Relative: Higher

Actual: 4563 ft.

RCRA Listings:

Date Form Received by Agency:	20101026
Handler Name:	Celebration Centre Non Profit Org
Handler Address:	24057 LAKE DR
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAP000210880
Contact Name:	MARY CUCCIA
Contact Address:	PO BOX 6810
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	909-338-9394
Contact Fax:	Not reported
Contact Email:	MARYCUCCIA@VERISON.NET
Contact Title:	SENIOR PASTOR
EPA Region:	09
Land Type:	Private
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 6810
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Celebration Centre
Owner Type:	Private
Operator Name:	Celebration Centre
Operator Type:	Private
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline

CELEBRATION CENTRE NON PROFIT ORG (Continued) **1025881010**

2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20101124
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Hazardous Waste Summary:

Waste Code:	D001
Waste Description:	Ignitable Waste

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: CELEBRATION CENTRE	
Legal Status:	Private
Date Became Current:	20030124
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 6810
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	909-338-9394
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CELEBRATION CENTRE	
Legal Status:	Private
Date Became Current:	20030124
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 6810
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	909-338-9394
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name: CELEBRATION CENTRE	
Legal Status:	Private

CELEBRATION CENTRE NON PROFIT ORG (Continued) **1025881010**

Date Became Current: 20030124
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 6810
Owner/Operator City,State,Zip: CRESTLINE, CA 92325
Owner/Operator Telephone: 909-338-9394
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CELEBRATION CENTRE
Legal Status: Private
Date Became Current: 20030124
Date Ended Current: Not reported
Owner/Operator Address: PO BOX 6810
Owner/Operator City,State,Zip: CRESTLINE, CA 92325
Owner/Operator Telephone: 909-338-9394
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20101026
Handler Name: CELEBRATION CENTRE NON PROFIT ORG
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20100720
Handler Name: CELEBRATION CENTRE NON PROFIT ORG
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 562112
NAICS Description: HAZARDOUS WASTE COLLECTION

Facility Has Received Notices of Violations:
Violations: No Violations Found

CELEBRATION CENTRE NON PROFIT ORG (Continued) **1025881010**

Evaluation Action Summary:

Evaluations:	No Evaluations Found

PFAS ECHO:

Name:	CELEBRATION CENTRE NON PROFIT ORG
Address:	Not reported
City,State,Zip:	CRESTLINE, CA
Latitude:	34.259922
Longitude:	-117.276468
Count:	1
County:	SAN BERNARDINO
Status:	Inactive
Region:	09
Industry:	Waste Management
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110070798243
Facility Percent Minority:	-
Facility Derived Tribes:	-
Facility Population:	-
EPA Programs:	RCRA
Federal Facility:	No
Federal Agency:	-
Facility FIPS Code:	06071
Facility Indian Country Flag:	N
Facility Collection Method:	Zip Code Centroid
Facility Derived HUC:	-
Facility Derived WBD:	-
Facility Derived CD113:	-
Facility Derived CB2010:	-
Facility Major Flag:	-
Facility Active Flag:	-
Facility Inspection Count:	0
Facility Date Last Inspection:	-
Facility Days Last Inspection:	-
Facility Informal Count:	0
Facility Date Last Informal Action:	-
Facility Formal Action Count:	0
Facility Date Last Formal Action:	-
Facility Total Penalties:	0
Facility Penalty Count:	-
Facility Date Last Penalty:	-
Facility Last Penalty AMT:	-
Facility QTRS With NC:	0
Facility Programs With SNC:	0
Facility Compliance Status:	No Violation Identified
Facility SNC Flag:	N
AIR Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	Y
TRI Flag:	N
GHG Flag:	N
AIR IDS:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-

CELEBRATION CENTRE NON PROFIT ORG (Continued) **1025881010**

NPDES IDS:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDS:	CAP000210880
RCRA Permit Types:	Other
RCRA NAICS:	562112
SDWA IDS:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA SNC Flag:	N
TRI IDS:	-
TRI Releases Transfers:	-
TRI On Site Releases:	-
TRI Off Site Transfers:	-
TRI Reporter:	-
Facility IMP Water Flag:	-
EJSCREEN Flag US:	N
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.276468,%22y%22:34.259922,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

E34 **MARK CURRY** **RCRA NonGen / NLR** **1027447060**
WSW **717 ROCKY LOOP** **CAC003184664**
1/8-1/4 **CRESTLINE, CA 92325**
0.134 mi.
710 ft. **Site 1 of 2 in cluster E**

Relative:
Higher

Actual:
4602 ft.

RCRA Listings:

Date Form Received by Agency:	20220711
Handler Name:	Mark Curry
Handler Address:	717 ROCKY LOOP
Handler City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAC003184664
Contact Name:	MARK CURRY
Contact Address:	P.O BOX 1121
Contact City,State,Zip:	CRESTLINE, CA 92325
Contact Telephone:	931-915-0619
Contact Fax:	Not reported
Contact Email:	GRAVITYFIVE@GMAIL.COM
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	P.O BOX 1121
Mailing City,State,Zip:	CRESTLINE, CA 92325
Owner Name:	Mark Curry
Owner Type:	Other
Operator Name:	Mark Curry
Operator Type:	Other
Short-Term Generator Activity:	No

MARK CURRY (Continued) **1027447060**

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220711
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: MARK CURRY	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P.O BOX 1121
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	931-915-0619
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: MARK CURRY	
Legal Status:	Other

MARK CURRY (Continued) **1027447060**

Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P.O BOX 1121
Owner/Operator City,State,Zip:	CRESTLINE, CA 92325
Owner/Operator Telephone:	931-915-0619
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20220711
Handler Name: MARK CURRY	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	No
Electronic Manifest Broker:	No

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

D35 **EAST WEST SELF SERVE** **UST** **U004061574**
West **24051 LAKE DR** **N/A**
1/8-1/4 **CRESTLINE, CA 92325**
0.141 mi.
745 ft. **Site 5 of 6 in cluster D**

Relative:
Higher

Actual:
4567 ft.

UST:

Name:	EAST WEST SELF SERVE
Address:	24051 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Facility ID:	86007908
Permitting Agency:	SAN BERNARDINO COUNTY
CERSID:	Not reported
Latitude:	34.24347
Longitude:	-117.27854
Owner type:	Not reported
Facility type:	Not reported
Num of inuse ust:	Not reported
Num of closed ust:	Not reported
Num of oos ust:	Not reported
Epa region:	Not reported
Tribal lands:	Not reported

EAST WEST SELF SERVE (Continued) **U004061574**

Tank owner name:	Not reported
Tank owner mailing address:	Not reported
Tank owner mailing city:	Not reported
Tank owner mailing zip:	Not reported
Tank owner mailing state:	Not reported
Tank operator name:	Not reported
Tank operator mailing address:	Not reported
Tank operator mailing city:	Not reported
Tank operator mailing zip:	Not reported
Tank operator mailing state:	Not reported
Tankidnumber:	Not reported
Tank status:	Not reported
Tank configuration:	Not reported
Tank closure date:	Not reported
Tank installation date:	Not reported
Tank num of compartments:	Not reported
Tank contents:	Not reported
Tank capacity gallons:	Not reported
Tank type:	Not reported
Tank pc construction:	Not reported
Tank pwpiping construction:	Not reported
Tank piping type:	Not reported
Tank piping construction:	Not reported
Tank sacrificial anode:	Not reported
Tank cp impressed current:	Not reported
Tank cp shutoff:	Not reported
Tank alarms:	Not reported
Tank ball float:	Not reported
Tank spill bucket:	Not reported

D36 **EAST WEST SELF SERV** **SWEEPS UST** **U001574722**
West **24051 LAKE DRIVE** **HIST UST** **N/A**
1/8-1/4 **CRESTLINE, CA 92325**
0.141 mi.
745 ft. **Site 6 of 6 in cluster D**

Relative:
Higher

Actual:
4567 ft.

SWEEPS UST:

Name:	EAST WEST SELF SERV
Address:	24051 LAKE DR
City:	CRESTLINE
Status:	Active
Comp Number:	48533
Number:	9
Board Of Equalization:	44-021103
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	36-000-048533-000001
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	3

Name: EAST WEST SELF SERV

EAST WEST SELF SERV (Continued) **U001574722**

Address:	24051 LAKE DR
City:	CRESTLINE
Status:	Active
Comp Number:	48533
Number:	9
Board Of Equalization:	44-021103
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	3
SWRCB Tank Id:	36-000-048533-000002
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

Name:	EAST WEST SELF SERV
Address:	24051 LAKE DR
City:	CRESTLINE
Status:	Active
Comp Number:	48533
Number:	9
Board Of Equalization:	44-021103
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	36-000-048533-000003
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	Not reported

HIST UST:

Name:	EAST WEST SELF SERV
Address:	24051 LAKE DRIVE
City,State,Zip:	CRESTLINE, CA 92325
File Number:	0002aa24
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002aa24.pdf
Region:	STATE
Facility ID:	00000048533
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	RICHMOND WADDEN
Telephone:	7143386012
Owner Name:	WADDEN, INC.
Owner Address:	24051 LAKE DRIVE
Owner City,St,Zip:	CRESTLINE, CA 92325
Total Tanks:	0003

Tank Num:	001

EAST WEST SELF SERV (Continued) **U001574722**

Container Num:	1
Year Installed:	1970
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	002
Container Num:	3
Year Installed:	1970
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Tank Num:	003
Container Num:	2
Year Installed:	1970
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

E37 **MOUNTAIN DISPOSAL SERVICE INC.** **SWEEPS UST** **U001574727**
WSW **716 ROCKY LOOP** **HIST UST** **N/A**
1/8-1/4 **CRESTLINE, CA 92325** **HWTS**
0.154 mi.
815 ft. **Site 2 of 2 in cluster E**

Relative:
Higher

Actual:
4601 ft.

SWEEPS UST:

Name:	MOUNTAIN DISPOSAL SERVICE INC.
Address:	716 ROCKY LOOP
City:	CRESTLINE
Status:	Active
Comp Number:	39040
Number:	9
Board Of Equalization:	Not reported
Referral Date:	03-19-92
Action Date:	03-19-92
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	36-000-039040-000001
Tank Status:	A
Capacity:	500
Active Date:	08-23-88
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	1

HIST UST:

Name:	MOUNTAIN DISPOSAL SERVICE INC

MOUNTAIN DISPOSAL SERVICE INC. (Continued) **U001574727**

Address:	716 ROCKY LOOP
City,State,Zip:	CRESTLINE, CA 92325
File Number:	0002a2ed
URL:	https://documents.geotracker.waterboards.ca.gov/ustpdfs/pdf/0002a2ed.pdf
Region:	STATE
Facility ID:	00000039040
Facility Type:	Other
Other Type:	TRUCK YARD
Contact Name:	JERRY PETERSON
Telephone:	7143382417
Owner Name:	MOUNTAIN DISPOSAL SERVICE INC.
Owner Address:	716 ROCKY LOOP
Owner City,St,Zip:	CRESTLINE, CA 92325
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Visual

Click here for Geo Tracker PDF:

HWTS:

Name:	MOUNTAIN DISPOSAL SERVICE INC
Address:	716 ROCKY LOOP
Address 2:	Not reported
City,State,Zip:	CRESTLINE, CA 92325
EPA ID:	CAX000216598
Inactive Date:	04/30/1986
Create Date:	05/07/1985
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	Not reported
Mailing Address 2:	Not reported
Mailing City,State,Zip:	CRESTLINE, CA 923250000
Owner Name:	Not reported
Owner Address:	Not reported
Owner Address 2:	Not reported
Owner City,State,Zip:	Not reported
Owner Phone:	Not reported
Owner Fax:	Not reported
Contact Name:	CANCELLED BY ROBIN HARPER ON
Contact Address:	12/29/1994
Contact Address 2:	Not reported
City,State,Zip:	Not reported
Contact Phone:	Not reported
Contact Fax:	Not reported
Facility Status:	Inactive
Facility Type:	PERMANENT
Category:	STATE
Latitude:	34.066377
Longitude:	-117.127901

38 North 1/8-1/4 0.198 mi. 1047 ft. | **HUSTON CREEK WASTEWATER TREATMENT PLANT**
246 HUSTON DR
CRESTLINE, CA 92325 | **San Bern. Co. Permit**
CERS | **S105790355**
N/A

Relative: Lower

Actual: 4465 ft.

San Bern. Co. Permit:

Name:	HUSTON CREEK WASTEWATER TREATMENT PLANT
Address:	246 HUSTON DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0003870
Owner:	Crestline Sanitation District
Permit Number:	PT0005432
Permit Category:	HAZARDOUS MATERIALS 4-10 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	09/30/2023

Name:	HUSTON CREEK WASTEWATER TREATMENT PLANT
Address:	246 HUSTON DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0003870
Owner:	Crestline Sanitation District
Permit Number:	PT0005422
Permit Category:	EPCRA FACILITY
Facility Status:	INACTIVE
Expiration Date:	09/30/2013

Name:	HUSTON CREEK WASTEWATER TREATMENT PLANT
Address:	246 HUSTON DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0003870
Owner:	Crestline Sanitation District
Permit Number:	PT0005433
Permit Category:	CALARP FACILITY PERMIT
Facility Status:	INACTIVE
Expiration Date:	09/30/2011

Name:	HUSTON CREEK WASTEWATER TREATMENT PLANT
Address:	246 HUSTON DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0003870
Owner:	Crestline Sanitation District
Permit Number:	PT0005441
Permit Category:	RMP INSPECTION - PROGRAM 3
Facility Status:	INACTIVE
Expiration Date:	09/30/2011

Name:	HUSTON CREEK WASTEWATER TREATMENT PLANT
Address:	246 HUSTON DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	SAN BERNARDINO
Facility ID:	FA0003870
Owner:	Crestline Sanitation District
Permit Number:	PT0005434
Permit Category:	CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR

HUSTON CREEK WASTEWATER TREATMENT PLANT (Continued) **S105790355**

Facility Status: INACTIVE
Expiration Date: 09/30/2003

CERS:
Name: HUSTON CREEK WASTEWATER TREATMENT PLANT
Address: 246 HUSTON DRIVE
City,State,Zip: CRESTLINE, CA 92325
Site ID: 394949
CERS ID: 10040461
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 394949
Site Name: Huston Creek Wastewater Treatment Plant
Violation Date: 05-26-2020
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 05/26/2020. Observed (1) 350 gallon container of diesel and (1) ~30 gallon container of diesel, which was not disclosed in the hazardous materials inventory submitted via CERS on 12/30/2019. Violation was corrected on site at the time of the inspection; operator resubmitted an accurate and complete hazardous materials inventory via CERS.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 09-11-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Routine inspeciton
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-26-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 05-15-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: ROUTINE HANDLER INSPECTION FOR HUSTON CREEK WASTEWATER TREATMENT PLANT.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP

HUSTON CREEK WASTEWATER TREATMENT PLANT (Continued) **S105790355**

Eval Source: CERS,

Affiliation:

Affiliation Type Desc: CUPA District
Entity Name: San Bernardino County Fire
Entity Title: Not reported
Affiliation Address: 620 South E Street
Affiliation City: San Bernardino
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Identification Signer
Entity Name: Ron Scriven
Entity Title: General Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Parent Corporation
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Ron Scriven
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92325
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: P.O. Box 3395
Affiliation City: Crestline
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92325
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Crestline Sanitation District
Entity Title: Not reported
Affiliation Address: Not reported

HUSTON CREEK WASTEWATER TREATMENT PLANT (Continued) **S105790355**

Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 338-1751,
Affiliation Type Desc:	Document Preparer
Entity Name:	Ron Scriven
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Legal Owner
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-1751,
Affiliation Type Desc:	Property Owner
Entity Name:	Crestline Sanitation District
Entity Title:	Not reported
Affiliation Address:	P.O. Box 3395
Affiliation City:	Crestline
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-1751,

F39 **SNYDERS TIREWORKS** **LUST** **S100225180**
West **23952 LAKE DR** **CERS HAZ WASTE** **N/A**
1/4-1/2 **CRESTLINE, CA 92325** **HIST CORTESE**
0.265 mi. **San Bern. Co. Permit**
1397 ft. **Site 1 of 2 in cluster F** **CERS**

Relative:
Higher

Actual:
4588 ft.

LUST:

Name:	VIKING AUTO CENTER
Address:	23952 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Lead Agency:	SAN BERNARDINO COUNTY
Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607100689
Global Id:	T0607100689
Latitude:	34.243527
Longitude:	-117.280706
Status:	Completed - Case Closed
Status Date:	05/17/2001
Case Worker:	CR2
RB Case Number:	6B3600119T
Local Agency:	SAN BERNARDINO COUNTY

SNYDERS TIREWORKS (Continued) **S100225180**

File Location:	Local Agency
Local Case Number:	99132
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
EPA Region:	9
Coordinate Source:	Google Geocode
Cuf Case:	NO
Quantity Released Gallons:	Not reported
Begin Date:	08/01/1989
Leak Reported Date:	10/21/1999
How Discovered:	Tank Closure
How Discovered Description:	Not reported
Discharge Source:	Other
Discharge Cause:	Unknown
Stop Method:	Not reported
Stop Description:	Not reported
No Further Action Date:	05/17/2001
CA Water Watershed Name:	Mojave - Upper Mojave (628.20)
Dwr Groundwater Subbasin Name:	Not reported
Disadvantaged Community:	Not reported
CA Enviroscreen 3 Score:	36-40%
CA Enviroscreen 4 Score:	40-45%
Military DOD Site:	No
Facility Project Subtype:	Not reported
RWQCB Region:	LAHONTAN RWQCB (REGION 6V)
Site History:	Not reported

LUST:

Global Id:	T0607100689
Contact Type:	Local Agency Caseworker - Primary Caseworker
Contact Name:	CATHERINE RICHARDS
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	crichards@sbcfire.org
Phone Number:	9093868419

Global Id:	T0607100689
Contact Type:	Regional Board Caseworker
Contact Name:	JEHIEL CASS
Organization Name:	LAHONTAN RWQCB (REGION 6V)
Address:	15095 Armagosa Road, Building 2, Suite 210
City:	VICTORVILLE
Email:	jehiel.cass@waterboards.ca.gov
Phone Number:	7602412434

LUST:

Global Id:	T0607100689
Action Type:	Other
Date:	08/01/1989
Action:	Leak Discovery

Global Id:	T0607100689
Action Type:	Other
Date:	10/21/1999
Action:	Leak Reported

SNYDERS TIREWORKS (Continued) **S100225180**

Global Id: T0607100689
Action Type: ENFORCEMENT
Date: 11/18/1999
Action: * Historical Enforcement

Global Id: T0607100689
Action Type: Other
Date: 08/01/1989
Action: Leak Stopped

Global Id: T0607100689
Action Type: ENFORCEMENT
Date: 04/03/2002
Action: Staff Letter

LUST:
Global Id: T0607100689
Status: Open - Case Begin Date
Status Date: 08/01/1989

Global Id: T0607100689
Status: Open - Site Assessment
Status Date: 11/18/1999

Global Id: T0607100689
Status: Completed - Case Closed
Status Date: 05/17/2001

CERS HAZ WASTE:
Name: SNYDERS TIREWORKS
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Site ID: 68689
CERS ID: 10051339
CERS Description: Hazardous Waste Generator

HIST CORTESE:
edr_fname: MICHELLE WHITEHEAD
edr_fadd1: 23952 LAKE
City,State,Zip: CRESTLINE, CA 92325
Region: CORTESE
Facility County Code: 36
Reg By: LTNKA
Reg Id: 6B3600119T

San Bern. Co. Permit:
Name: SNYDERS TIREWORKS
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0010495
Owner: SNYDER GROUP INC
Permit Number: PT0022355
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS

SNYDERS TIREWORKS (Continued) **S100225180**

Facility Status: ACTIVE
Expiration Date: 05/31/2023

Name: SNYDERS TIREWORKS
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0010495
Owner: SNYDER GROUP INC
Permit Number: PT0017847
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 05/31/2023

Name: DAVE'S VIKING AUTO
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002649
Owner: NELSON, ROBERT DAVID
Permit Number: PT0007787
Permit Category: SPECIAL HANDLER
Facility Status: INACTIVE
Expiration Date: 04/30/2006

Name: DAVE'S VIKING AUTO
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Region: SAN BERNARDINO
Facility ID: FA0002649
Owner: NELSON, ROBERT DAVID
Permit Number: PT0007788
Permit Category: SPECIAL GENERATOR
Facility Status: INACTIVE
Expiration Date: 04/30/2006

CERS:
Name: SNYDERS TIREWORKS
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Site ID: 68689
CERS ID: 10051339
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 06-13-2018
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description: Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.
Violation Notes: Returned to compliance on 06/27/2018. Facility owner did not adequately demonstrate that hazardous materials training is conducted for the facility's employees. CORRECTIVE ACTION: Sign the Certificate

SNYDERS TIREWORKS (Continued) **S100225180**

of Compliance in attestation that initial and annual training is conducted, and that training records are maintained for a minimum of three years.

Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 06-13-2018
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 06/27/2018. The EPA ID Number associated with this facility was inactive at the time of the inspection. CORRECTIVE ACTION: Sign the Certificate of Compliance in attestation that Form 1358 was completed and submitted DTSC in order to reactivate the EPA ID Number associated with this facility.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-07-2015
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description: Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes: Returned to compliance on 07/17/2015.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-08-2021
Citation: HSC 6.95 25508(a)(3) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(3)
Violation Description: Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes: Returned to compliance on 07/08/2021. OBSERVATION: At the time of the inspection the inventory items submitted via CERS on 6/29/2018 were submitted with obsolete federal hazard categories. The hazardous materials inventory violation was corrected on site at the time of the inspection.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-08-2021

SNYDERS TIREWORKS (Continued) **S100225180**

Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 07/08/2021. OBSERVATION: At the time of the inspection (2) 55-Gallon drums of waste antifreeze and (1) 55-Gallon drum of used paper filters were observed with a missing hazardous waste label. The labeling violation was corrected on site at the time of the inspection.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	68689
Site Name:	SNYDERS TIREWORKS
Violation Date:	07-08-2021
Citation:	Un-Specified
Violation Description:	Hazardous Waste Generator Program - Administration/Documentation - General Local Ordinance
Violation Notes:	Returned to compliance on 07/08/2021. OBSERVATION: At the time of the inspection (1) 55-Gallon drum of used paper filters were observed on site which had not been reported via CERS. The facility information reporting violation was corrected on site at the time of the inspection.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	68689
Site Name:	SNYDERS TIREWORKS
Violation Date:	06-13-2018
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 06/13/2018. Observed (2) 55 gallon drums containing waste automotive coolant to be missing appropriate hazardous waste labeling. Violation corrected on site at the time of the inspection.
Violation Division:	San Bernardino County Fire Department
Violation Program:	HW
Violation Source:	CERS,
Site ID:	68689
Site Name:	SNYDERS TIREWORKS
Violation Date:	06-13-2018
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 06/29/2018. The site map submitted via CERS

SNYDERS TIREWORKS (Continued) **S100225180**

on 02/03/2018 is missing the location(s) of the hazardous materials and hazardous waste stored on site. CORRECTIVE ACTION: Submit an accurate and complete site map into the California Environmental Reporting System (CERS).

Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-07-2015
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/07/2015. Failure to complete hazardous waste labels (CCR 66262.34(f)(3))
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-08-2021
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 07/08/2021. OBSERVATION: At the time of the inspection the business plan was last reviewed and certified via CERS on 6/29/2018. The business plan annual review/certification violation was corrected on site at the time of the inspection.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 06-13-2018
Citation: 40 CFR 1 262.34(d)(5)(iii) - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 262.34(d)(5)(iii)
Violation Description: Failure to ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.
Violation Notes: Returned to compliance on 06/27/2018. Facility owner did not adequately demonstrate that hazardous waste training is conducted for the facility's employees. CORRECTIVE ACTION: Sign the Certificate of Compliance in attestation that initial and annual training is conducted, and that training records are maintained for a minimum of three years.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-07-2015

SNYDERS TIREWORKS (Continued) **S100225180**

Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes: Returned to compliance on 07/17/2015.
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Violation Date: 07-07-2015
Citation: HSC 6.5 Multiple Sections - California Health and Safety Code, Chapter 6.5, Section(s) Multiple Sections
Violation Description: Haz Waste Generator Program - Operations/Maintenance - General
Violation Notes: Returned to compliance on 07/07/2015. Failure to label hazardous waste containers (CCR 66262.34(f)(3))
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-13-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 06-13-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: INSPECTION OF SNYDER'S TIREWORKS IN CRESTLINE.
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-07-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: INSPECTION OF SNYDER'S TIREWORKS IN CRESTLINE.
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

SNYDERS TIREWORKS (Continued) **S100225180**

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-08-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-08-2021
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 68689
Site Name: SNYDERS TIREWORKS
Site Address: 23952 LAKE DR
Site City: CRESTLINE
Site Zip: 92325
Enf Action Date: 07-07-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Site ID: 68689
Site Name: SNYDERS TIREWORKS
Site Address: 23952 LAKE DR
Site City: CRESTLINE
Site Zip: 92325
Enf Action Date: 07-07-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Coordinates:
Site ID: 68689
Facility Name: SNYDERS TIREWORKS
Env Int Type Code: HWG
Program ID: 10051339
Coord Name: Not reported
Ref Point Type Desc: Unknown,
Latitude: 34.243462
Longitude: -117.280746

SNYDERS TIREWORKS (Continued) **S100225180**

Affiliation:

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	PO BOX 1503
Affiliation City:	CRESTLINE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,

Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92415-0153
Affiliation Phone:	(909) 386-8401,

Affiliation Type Desc:	Environmental Contact
Entity Name:	ROBERT SNYDER
Entity Title:	Not reported
Affiliation Address:	PO BOX 1503
Affiliation City:	CRESTLINE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92325
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	SNYDER GROUP INC
Entity Title:	Not reported
Affiliation Address:	PO BOX 1503
Affiliation City:	CRESTLINE
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92325
Affiliation Phone:	(909) 338-5030,

Affiliation Type Desc:	Operator
Entity Name:	Robert J Snyder
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(909) 844-3118,

Affiliation Type Desc:	Parent Corporation
Entity Name:	SNYDERS TIREWORKS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported

SNYDERS TIREWORKS (Continued) **S100225180**

Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Name: VIKING AUTO CENTER
Address: 23952 LAKE DR
City,State,Zip: CRESTLINE, CA 92325
Site ID: 696035
CERS ID: T0607100689
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:
Affiliation Type Desc: Local Agency Caseworker
Entity Name: CATHERINE RICHARDS - SAN BERNARDINO COUNTY
Entity Title: Not reported
Affiliation Address: 620 SOUTH E STREET
Affiliation City: SAN BERNARDINO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9093868419,

Affiliation Type Desc: Regional Board Caseworker
Entity Name: JEHIEL CASS - LAHONTAN RWQCB (REGION 6V)
Entity Title: Not reported
Affiliation Address: 15095 Armagosa Road, Building 2, Suite 210
Affiliation City: VICTORVILLE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 7602412434,

F40 **VIKING AUTO CENTER** **LUST** **S105588632**
West **23952 LAKE DR** **Cortese** **N/A**
1/4-1/2 **CRESTLINE, CA 92325**
0.265 mi.
1397 ft. **Site 2 of 2 in cluster F**

Relative:
Higher

Actual:
4588 ft.

LUST Region 6V:
Name: VIKING AUTO CENTER
Address: 23952 LAKE DR
City: CRESTLINE
Region: 6V
Case Number: 6B3600119T
Leak Record: 10/6/1989
Report Date: 10/21/1999
Reported By Address: Not reported
Responsible Party: MICHELLE WHITEHEAD
Operator: MICHELLE WHITEHEAD
Cross Street: SPRINGWATER
Local Agency: 36000L
Regional Board: 6V
Chemical: Diesel
Case Type: Other ground water affected
Funding: R
Enforce Type: SEL

VIKING AUTO CENTER (Continued) **S105588632**

How Found:	Tank Closure
How Stopped:	Not reported
Cause of Leak:	UNK
Leak Source:	UNK
Global ID:	T0607100689
Stop Date:	8/1/1989
Leak Confirm:	Not reported
Submit Workplan:	Not reported
Prelim Assess:	11/18/1999
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Close Date:	5/17/2001
Discovered:	8/1/1989
Enforce Date:	11/18/1999
Review Date:	1/18/2000
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
MTBE class:	*
Max MTBE Grnd Wtr:	Not reported
Max MTBE Soil:	Not reported
MTBE Counts:	0
MTBE Fuel:	0
MTBE Tested:	NRQ
Organization Name:	Not reported
Status:	Case Closed
Contact:	Not reported
Interim Action:	No
Pilot Program:	LUST
Lat/Long:	34.2432314 / -117.2802699
Staff Initials:	GDC
Local Agency Staff:	CR2
Lead Agency:	Local Agency
Summary:	AUG 15 AND SEP 30 ACTION DATES. CASE CLOSURE CANDIDATE
Basin Number:	UNNAMED FORMATION (6
Beneficial:	Not reported
Priority:	Not reported
UST Cleanup Fund ID:	Not reported
Suspended:	Not reported
Local Case Number:	99132
Amount:	Not reported
Abate Method:	Not reported
Water System:	Not reported
Well Name:	Not reported
Distance:	1841.880332
Wst Disch Reqrmnt Global ID:	Not reported
Wst Disch Reqrmnt Name:	Not reported

CORTESE:

Name:	VIKING AUTO CENTER
Address:	23952 LAKE DR
City,State,Zip:	CRESTLINE, CA 92325
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0607100689
Site/Facility Type:	LUST CLEANUP SITE

VIKING AUTO CENTER (Continued) **S105588632**

Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

G41 **FORWARD RELAY STATION 1-MS** **UXO** **1024713951**
SW **N/A**
1/2-1 **TWIN PEAKS, CA**
0.564 mi.
2978 ft. **Site 1 of 2 in cluster G**

Relative:
Higher

Actual:
5379 ft.

UXO:

DoD Component:	FUDS
Installation Name:	FORWARD RELAY STATION 1-MS
Name:	FORWARD RELAY STATION 1-MS
Address:	Not reported
Address 2:	Not reported
City,State,Zip:	TWIN PEAKS, CA
Site ID:	01OEW
Site Type:	Unexploded Munitions and Ordnance Area
Latitude:	34.233299
Longitude:	-117.278999

G42 **FORWARD RELAY STATION 1-MS** **FUDS** **1009484701**
SW **N/A**
1/2-1 **TWIN PEAKS, CA**
0.564 mi.
2978 ft. **Site 2 of 2 in cluster G**

Relative:
Higher

Actual:
5379 ft.

FUDS:

EPA Region:	09
Installation ID:	CA99799F544300
Congressional District Number:	23
Name:	FORWARD RELAY STATION 1-MS
FUDS Number:	J09CA0365
City:	TWIN PEAKS
State:	CA
County:	SAN BERNARDINO
Object ID:	3895
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Status:	Properties with all projects at site closeout
Current Owner:	PRIV: PRIVATE RESIDENTIAL, ROADS, WATER TANK CO

FORWARD RELAY STATION 1-MS (Continued) **1009484701**

EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=61076
Eligibility:	Eligible
Has Projects:	Yes
NPL Status:	Not reported
Project Required:	Yes
Feature Description:	FORWARD RELAY & VHF STATION CAMP
Latitude:	34.233299
Longitude:	-117.278999

FUDS Detail as of Jan 2015:

Fiscal Year:	2013
Federal Facility ID:	CA9799F5443
RAB:	Not reported
NPL Status:	Not Listed
Description:	8.28 ACRES
History:	FORWARD RELAY & VHF STATION CAMP
CTC:	12
Current Program:	Not reported
Future Program:	Not reported
Institutional ID:	61076

H43 SW 1/2-1 0.668 mi. 3529 ft. **OPERATIONAL SITE NORTON** **ENVIROSTOR** **S107736961 N/A**

CREASTLINE, CA

Site 1 of 2 in cluster H

Relative: Higher

Actual: 5245 ft.

ENVIROSTOR:

Name:	OPERATIONAL SITE NORTON
Address:	Not reported
City,State,Zip:	CREASTLINE, CA
Facility ID:	80001158
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Site Code:	Not reported
Site Type:	Military Evaluation
Site Type Detailed:	FUDS
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Douglas Bautista
Division Branch:	Cleanup Cypress
Assembly:	34
Senate:	19
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	DERA
Latitude:	34.23361
Longitude:	-117.2836
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED

OPERATIONAL SITE NORTON (Continued) **S107736961**

Alias Name:	CA99799FA49000
Alias Type:	Federal Facility ID
Alias Name:	J09CA7464
Alias Type:	INPR
Alias Name:	80001158
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	09/21/1999
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

H44 SW 1/2-1 0.669 mi. 3530 ft. **OPERATIONAL SITE NORTON** **FUDS** **1024904107 N/A**

CREASTLINE, CA

Site 2 of 2 in cluster H

Relative: Higher

Actual: 5245 ft.

FUDS:

EPA Region:	09
Installation ID:	CA99799FA49000
Congressional District Number:	23
Name:	OPERATIONAL SITE NORTON
FUDS Number:	J09CA7464
City:	CREASTLINE
State:	CA
County:	SAN BERNARDINO
Object ID:	9980
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Status:	Properties without projects
Current Owner:	FED: FEDERAL FEDERAL
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map?id=63202
Eligibility:	Eligible
Has Projects:	No
NPL Status:	Not reported
Project Required:	No
Feature Description:	The Air Force acquired 8.247 acres via a special use permit from the Department of Agriculture, U.S. Forest Service, on 19 November 1943. By November 1946, the site had expanded to 40 acres. The site was established as a radio forward relay station for the San Bernardino Army Airfield. The extent to which military improvements were constructed on the site is unknown. The site is not identified on a 1949 Real Estate Map for Norton AFB (previously known as San Bernardino Army Airfield) so it is assumed that the permit was terminated,-some-time prior to that year. There are no known military

OPERATIONAL SITE NORTON (Continued) **1024904107**

improvements remaining at the site. The site is owned by the U.S. Forest Service and part of the San Bernardino National Forest. The Crestline Village Water District has erected a storage tank on the property and the County of San Bernardino has a building housing communication equipment.

Latitude: 34.23361111
Longitude: -117.28361111

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CEDAR GLEN	S126984104	VIRAMONTES EXPRESS	TORRY ROAD -LAKE ARROWHEAD/ PA	92407	SWF/LF
CEDAR GLEN	S126984105	LOS ANGELES WASTE INDUSTRIES, INC.	TORRY ROAD / PAPOOSE LAKE	92407	SWF/LF
CRESTLINE	S106875761	CRESTLINE SANITATION DISTRICT	24516 LAKE DR.	92325	LUST, Cortese
SAN BERNARDINO COUNT	S107540087		ON STATE HIGHWAY 173, ~2 MILES		CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 06/23/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/26/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/31/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 54

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 62

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/12/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/09/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 05/30/2023
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 05/31/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/19/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/20/2023
Date Data Arrived at EDR: 05/09/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 66

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 04/06/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 04/19/2023
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 83

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/24/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 71

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/11/2023
Number of Days to Update: 84

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/23/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 48

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/06/2023
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing
Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 89

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/15/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 55

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/10/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/01/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/19/2023
Date Data Arrived at EDR: 06/20/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 55

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 02/16/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 75

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/18/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 83

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/09/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 09/26/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2023
Date Data Arrived at EDR: 04/04/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 66

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/20/2023
Date Data Arrived at EDR: 09/01/2023
Date Made Active in Reports: 09/20/2023
Number of Days to Update: 19

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 07/12/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 04/14/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 08/28/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 09/22/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 04/20/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 81

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 06/22/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 18

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/01/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/01/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 61

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/07/2022
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 05/17/2023
Number of Days to Update: 82

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/13/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 61

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 07/24/2023
Number of Days to Update: 60

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/24/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 54

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 05/02/2023
Number of Days to Update: 33

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 03/30/2023
Date Data Arrived at EDR: 03/30/2023
Date Made Active in Reports: 04/07/2023
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/05/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 07/05/2023
Date Data Arrived at EDR: 07/06/2023
Date Made Active in Reports: 09/25/2023
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/14/2023
Date Data Arrived at EDR: 06/14/2023
Date Made Active in Reports: 09/06/2023
Number of Days to Update: 84

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 03/31/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/10/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

DRYCLEAN GLENN CO DIST: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/03/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 83

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 05/03/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 05/17/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA CO DIST: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA CO DIST: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB CO DIST: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 04/23/2019
Date Data Arrived at EDR: 04/25/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1467

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB CO DIST: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SONOMA CO DIST: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 04/17/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO SIERRA DIST: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 05/07/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN NO COAST UNIFIED DIST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN LAKE CO DIST: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 04/29/2019
Date Data Arrived at EDR: 05/07/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1455

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 816

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 07/24/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS CO DIST: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 04/24/2023
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN BUTTE CO DIST: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1469

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 07/13/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA DIST: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO DIST: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/22/2023
Date Data Arrived at EDR: 05/24/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 82

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER CO DIST: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SHASTA CO DIST: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTEREY BAY DIST: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE DESERT DIST: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 78

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDO CO DIST: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL CO DIST: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN DIST: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 01/12/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 04/25/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQ VAL DIST: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 05/24/2023
Date Data Arrived at EDR: 05/30/2023
Date Made Active in Reports: 08/21/2023
Number of Days to Update: 83

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 05/11/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO CO DIST: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1461

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO METO DIST: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/19/2023
Number of Days to Update: 82

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RIVER DIST: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 06/08/2023
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 06/09/2023
Date Made Active in Reports: 08/30/2023
Number of Days to Update: 82

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/15/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/06/2023
Number of Days to Update: 79

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 09/13/2023
Date Data Arrived at EDR: 09/14/2023
Date Made Active in Reports: 09/21/2023
Number of Days to Update: 7

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 09/13/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/16/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/14/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 06/29/2023
Date Data Arrived at EDR: 06/29/2023
Date Made Active in Reports: 09/19/2023
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Annually

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/08/2023
Date Data Arrived at EDR: 05/08/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 06/06/2023
Date Data Arrived at EDR: 06/07/2023
Date Made Active in Reports: 08/25/2023
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Annually

SANTA CRUZ CO SITE MITI: Site Mitigation Listing
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/07/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/02/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 08/23/2023
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/17/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/06/2023
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 06/05/2023
Date Data Arrived at EDR: 06/05/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

CHROME PLATING: Chrome Plating Facilities Listing
This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 110

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/24/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI
Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 06/07/2023
Date Data Arrived at EDR: 06/08/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: No Update Planned

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 07/16/2023
Date Data Arrived at EDR: 07/18/2023
Date Made Active in Reports: 08/28/2023
Number of Days to Update: 41

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 06/27/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/03/2023
Date Data Arrived at EDR: 04/20/2023
Date Made Active in Reports: 07/10/2023
Number of Days to Update: 81

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 82

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/29/2023
Next Scheduled EDR Contact: 10/09/2023
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/12/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 76

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 13

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/26/2023
Date Data Arrived at EDR: 07/27/2023
Date Made Active in Reports: 08/03/2023
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 05/31/2023
Number of Days to Update: 34

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 06/21/2023
Date Data Arrived at EDR: 06/28/2023
Date Made Active in Reports: 09/14/2023
Number of Days to Update: 78

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/27/2023
Next Scheduled EDR Contact: 01/15/2024
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/10/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 79

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/10/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/19/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/13/2023
Date Data Arrived at EDR: 07/13/2023
Date Made Active in Reports: 09/27/2023
Number of Days to Update: 76

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 07/13/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 48

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/20/2023
Date Data Arrived at EDR: 06/22/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 82

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/20/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/02/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 07/07/2023
Number of Days to Update: 80

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/20/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/12/2023
Date Data Arrived at EDR: 05/02/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 42

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/25/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/05/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 81

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 07/31/2023
Date Made Active in Reports: 08/09/2023
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/01/2023
Date Data Arrived at EDR: 05/18/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/26/2022
Date Data Arrived at EDR: 08/29/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 78

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 07/31/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/11/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/10/2023
Date Data Arrived at EDR: 07/11/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/25/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 05/02/2023
Date Data Arrived at EDR: 05/04/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 82

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/09/2023
Date Data Arrived at EDR: 05/10/2023
Date Made Active in Reports: 08/01/2023
Number of Days to Update: 83

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/25/2023
Date Data Arrived at EDR: 05/25/2023
Date Made Active in Reports: 08/16/2023
Number of Days to Update: 83

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/04/2023
Date Data Arrived at EDR: 04/05/2023
Date Made Active in Reports: 06/27/2023
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 77

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 04/28/2023
Date Data Arrived at EDR: 04/28/2023
Date Made Active in Reports: 05/03/2023
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 04/11/2023
Date Data Arrived at EDR: 04/13/2023
Date Made Active in Reports: 07/11/2023
Number of Days to Update: 89

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 07/18/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/07/2023
Next Scheduled EDR Contact: 12/25/2023
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/08/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 08/29/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 05/10/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/15/2023
Next Scheduled EDR Contact: 12/04/2023
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/09/2023
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/12/2023
Next Scheduled EDR Contact: 01/01/2024
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/05/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2023
Date Data Arrived at EDR: 08/24/2023
Date Made Active in Reports: 09/12/2023
Number of Days to Update: 19

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 08/22/2023
Next Scheduled EDR Contact: 12/11/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 05/11/2023
Date Data Arrived at EDR: 05/11/2023
Date Made Active in Reports: 07/31/2023
Number of Days to Update: 81

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/11/2023
Date Data Arrived at EDR: 07/12/2023
Date Made Active in Reports: 09/26/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 07/26/2023
Next Scheduled EDR Contact: 11/13/2023
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/11/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/27/2023
Date Data Arrived at EDR: 04/25/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 80

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/02/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/27/2023
Date Data Arrived at EDR: 04/21/2023
Date Made Active in Reports: 07/07/2023
Number of Days to Update: 77

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/17/2023
Next Scheduled EDR Contact: 10/30/2023
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2023
Date Data Arrived at EDR: 06/02/2023
Date Made Active in Reports: 06/14/2023
Number of Days to Update: 12

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/06/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/03/2023
Date Data Arrived at EDR: 04/18/2023
Date Made Active in Reports: 06/13/2023
Number of Days to Update: 56

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/21/2023
Next Scheduled EDR Contact: 01/08/2024
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 05/04/2023
Date Data Arrived at EDR: 05/04/2023
Date Made Active in Reports: 07/25/2023
Number of Days to Update: 82

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/19/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022
Date Data Arrived at EDR: 11/16/2022
Date Made Active in Reports: 02/06/2023
Number of Days to Update: 82

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/08/2023
Next Scheduled EDR Contact: 11/20/2023
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/27/2023
Next Scheduled EDR Contact: 10/16/2023
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/27/2023
Next Scheduled EDR Contact: 11/06/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/06/2023
Next Scheduled EDR Contact: 10/23/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/10/2022
Next Scheduled EDR Contact: 11/27/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 08/30/2023
Next Scheduled EDR Contact: 12/18/2023
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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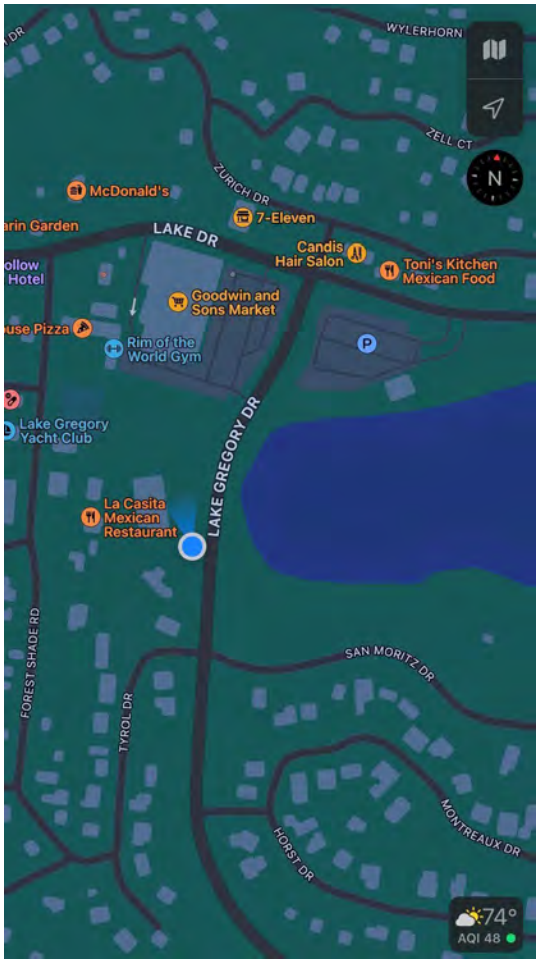
Appendix G – Noise Data

Site Number: NM-1		
Recorded By: Darshan Shivaiah, Dennis Dinh		
Job Number: 195651		
Date: 10/17/2023		
Time: 10:39 a.m.		
Location: In front of Crestline Branch San Bernardino County Library		
Source of Ambient Noise: Traffic along Lake Gregory Drive		
Source of Peak Noise: Traffic along Lake Gregory Drive		
Noise Data		
L_{eq} (dB)	L_{max}(dB)	L_{min} (dB)
61.7	75.6	41.3

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	06/04/2023	
	Microphone	Brüel & Kjær	4189	3086765	06/04/2023	
	Preamp	Brüel & Kjær	ZC 0032	25380	06/04/2023	
	Calibrator	Brüel & Kjær	4231	2545667	06/04/2023	

Weather Data			
Est.	Duration: 10 minutes		Sky: Sunny
	Note: dBA Offset = 0.00		Sensor Height (ft): 5 ft
	Wind Ave Speed (mph / m/s)	Temperature (degrees Fahrenheit)	Barometer Pressure (inches)
	2 mph	75	29.91

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		10/17/2023 10:39:49
End Time:		10/17/2023 10:49:49
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.10

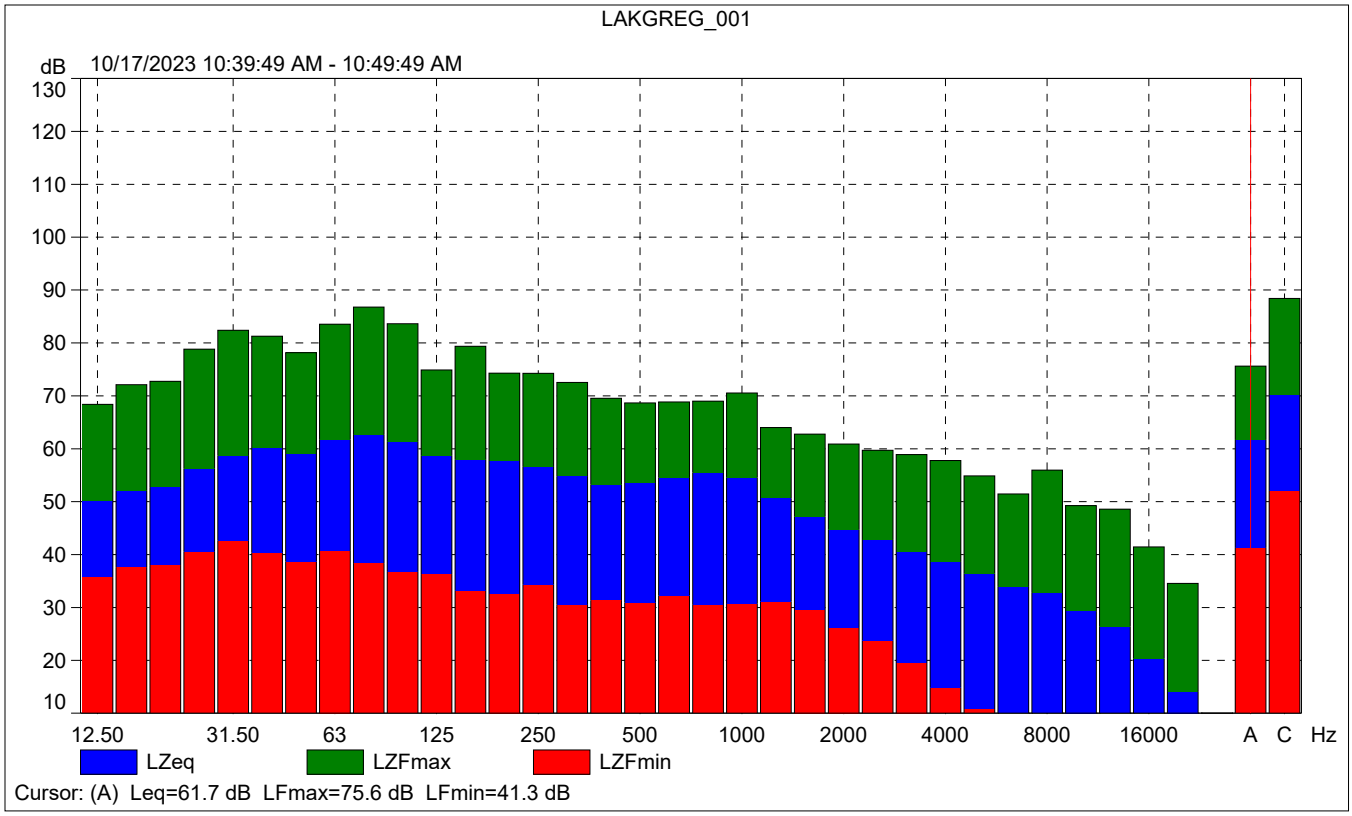
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

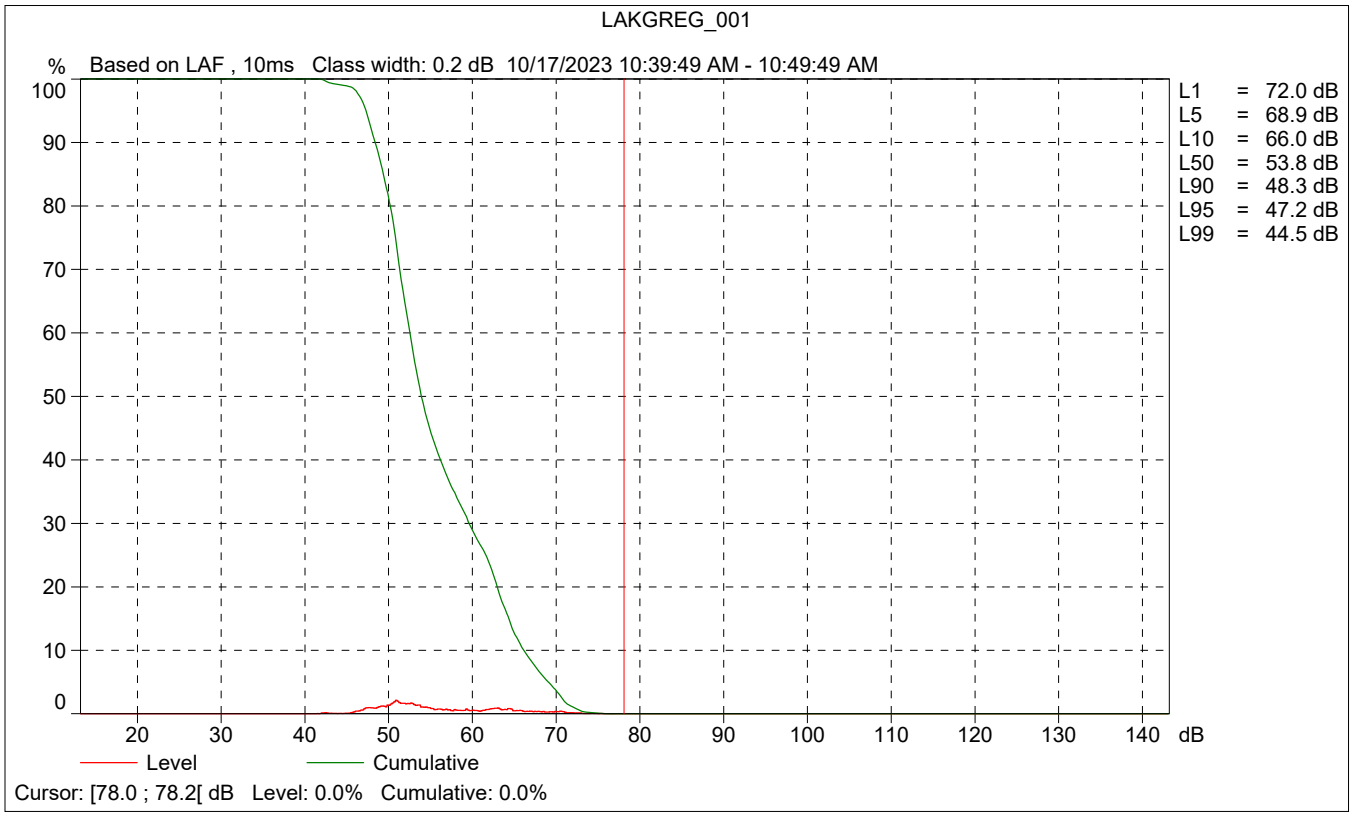
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

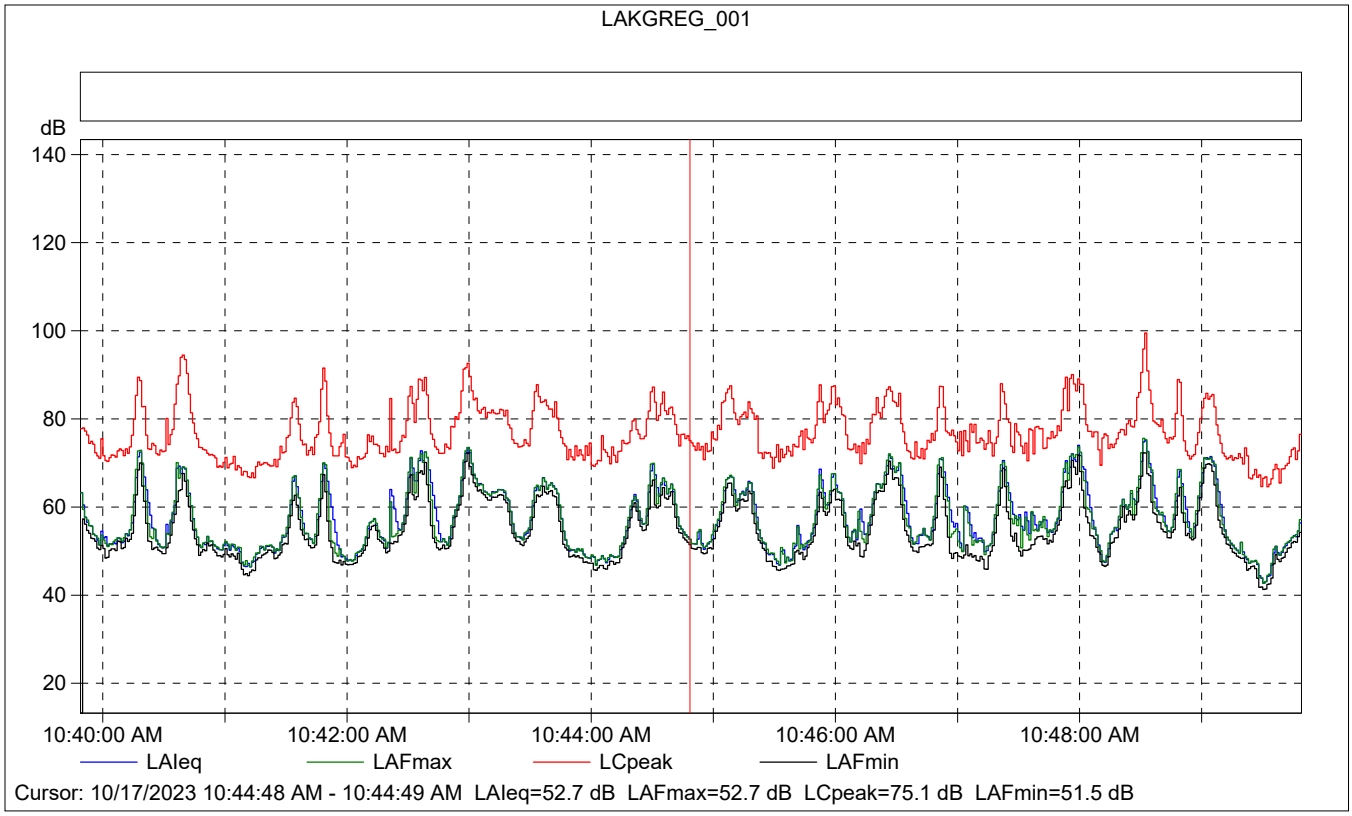
Calibration Time:		10/17/2023 10:39:03
Calibration Type:		External reference
Sensitivity:		43.7134429812431 mV/Pa

LAKGREG_001

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	61.7	75.6	41.3
Time	10:39:49 AM	10:49:49 AM	0:10:00				
Date	10/17/2023	10/17/2023					

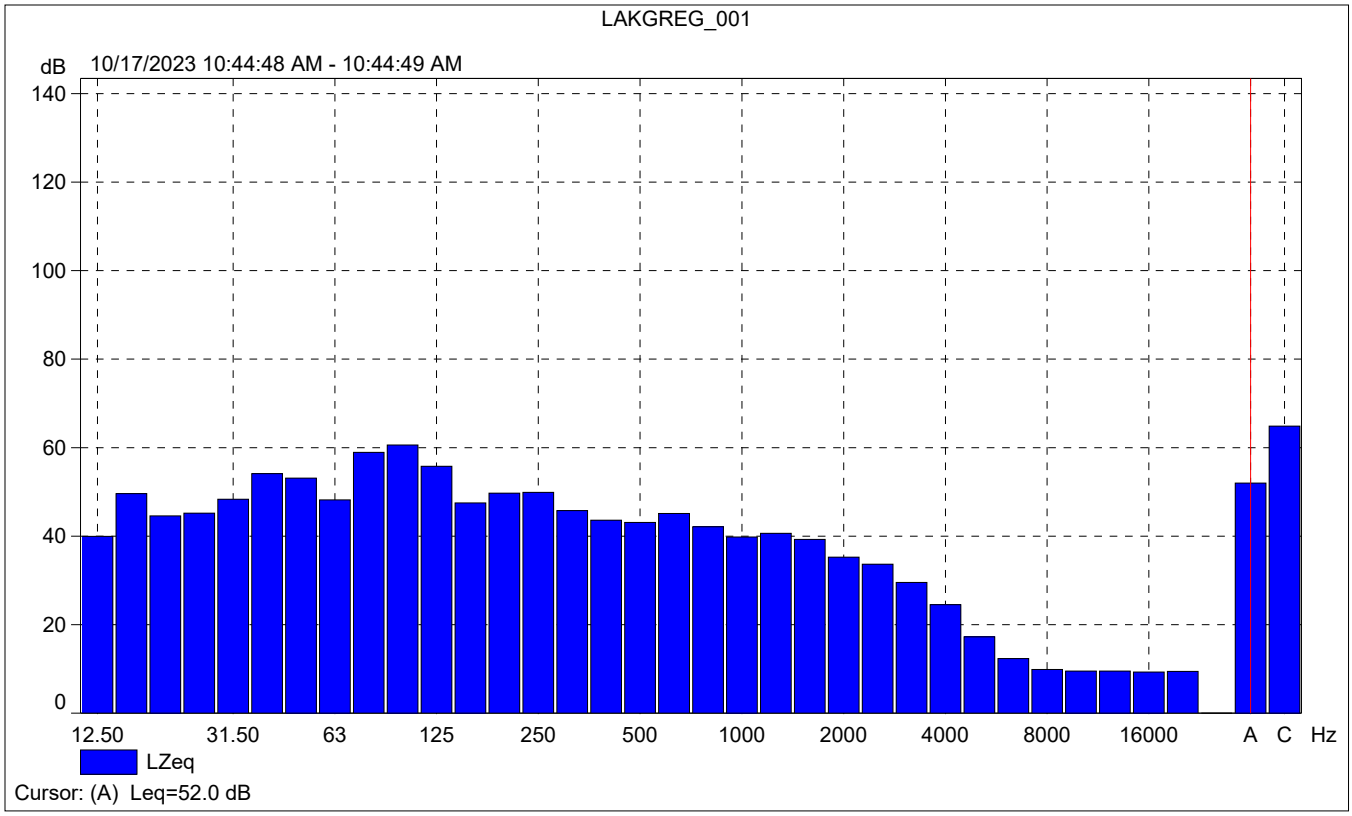

LAKGREG_001
dB
10/17/2023 10:39:49 AM - 10:49:49 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=61.7 dB LFmax=75.6 dB LFmin=41.3 dB

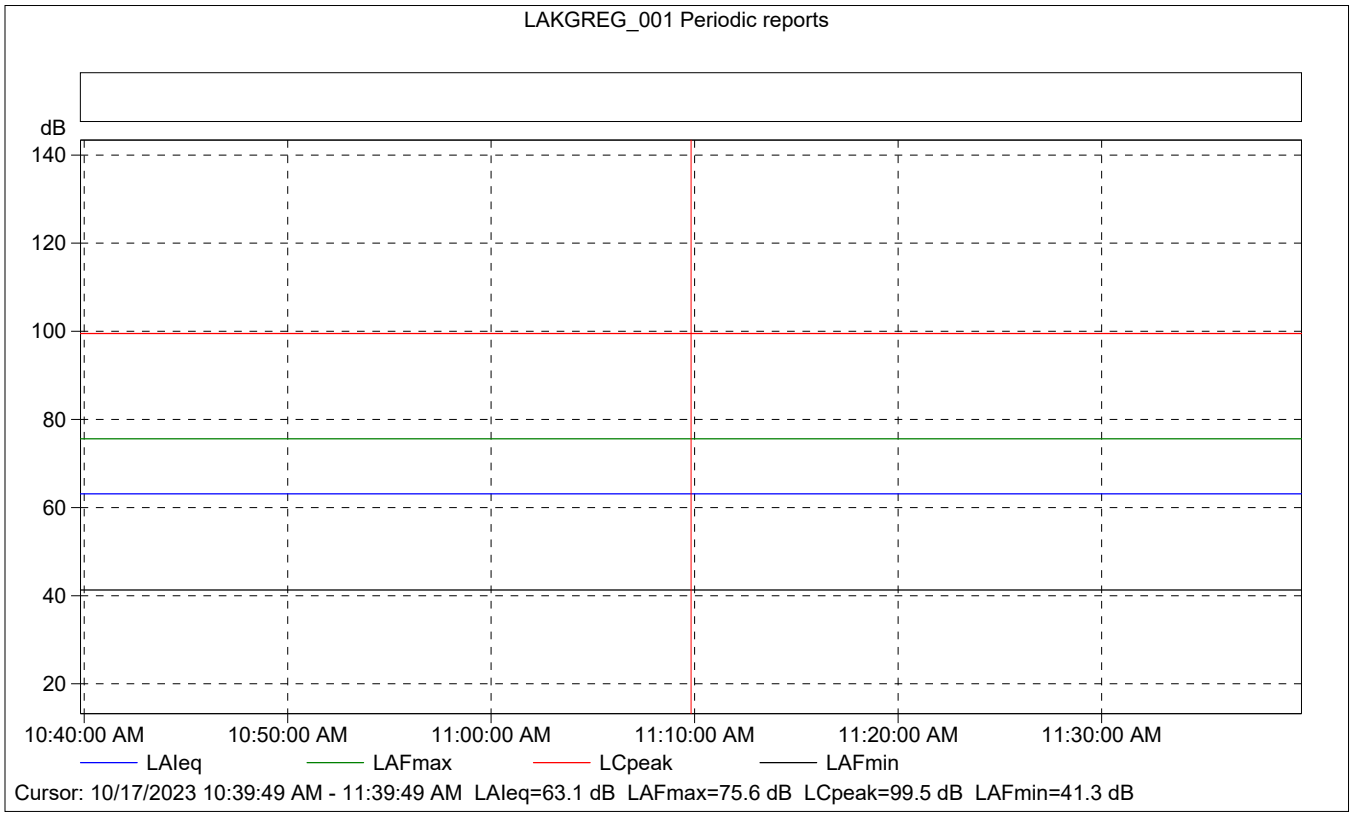

LAKGREG_001
%
Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 10:39:49 AM - 10:49:49 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 72.0 dB
L5 = 68.9 dB
L10 = 66.0 dB
L50 = 53.8 dB
L90 = 48.3 dB
L95 = 47.2 dB
L99 = 44.5 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.0%



LAKGREG_001

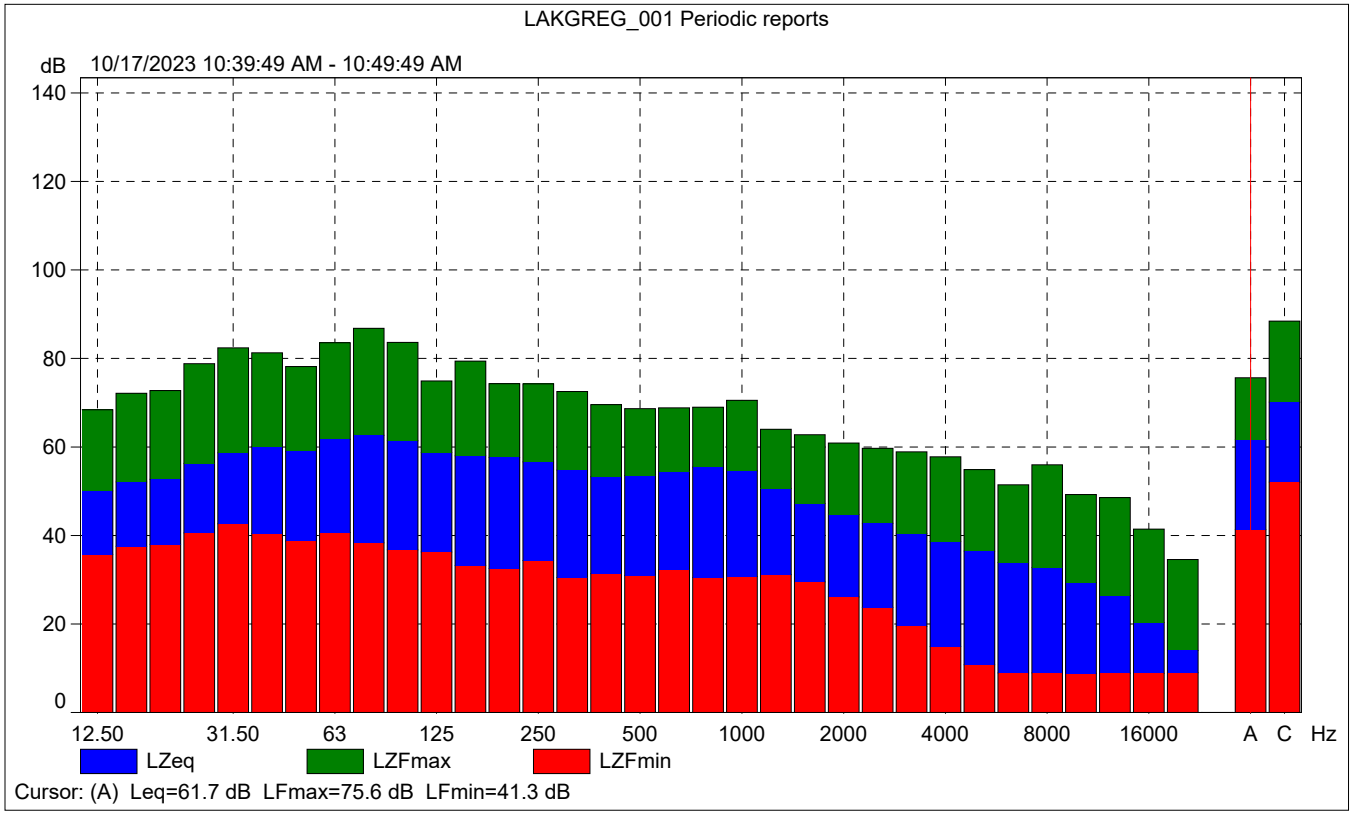
	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	52.7	52.7	51.5
Time	10:44:48 AM	0:00:01				
Date	10/17/2023					


LAKGREG_001
dB
10/17/2023 10:44:48 AM - 10:44:49 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=52.0 dB

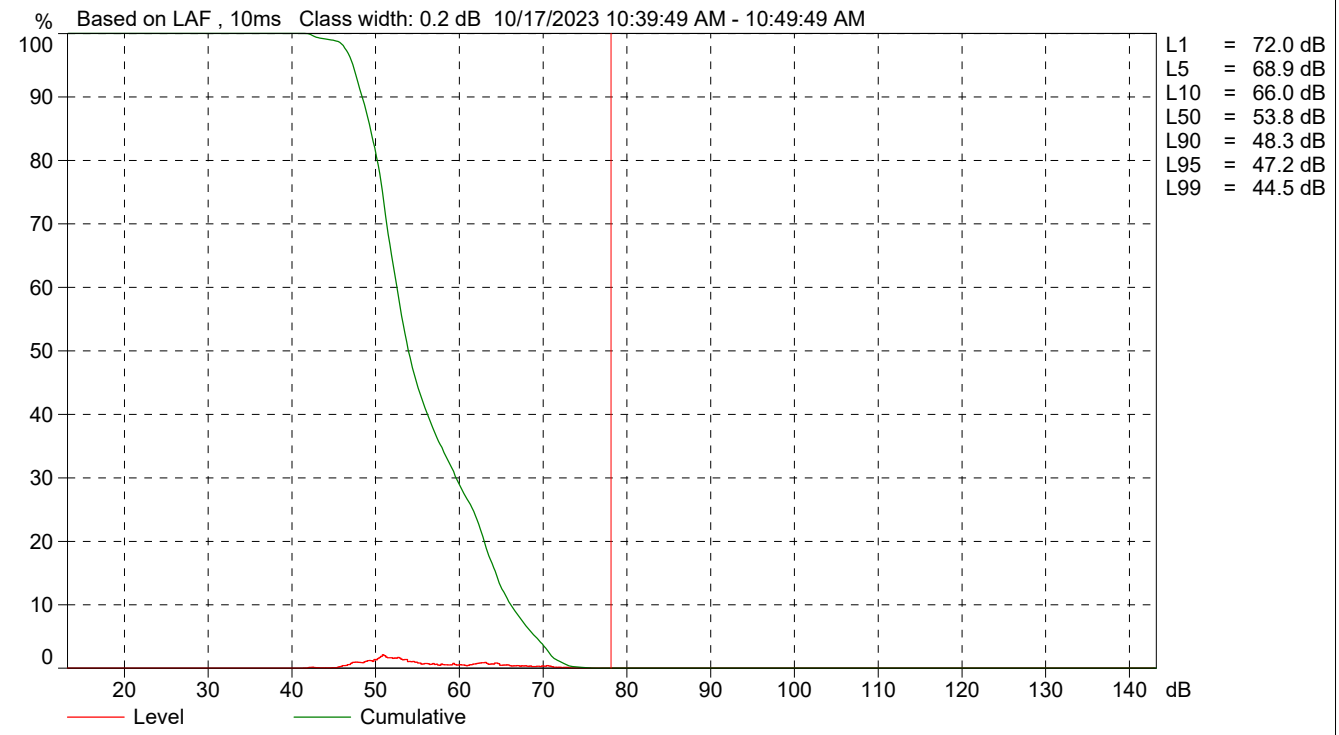

LAKGREG_001 Periodic reports
dB
140
120
100
80
60
40
20
10:40:00 AM
10:50:00 AM
11:00:00 AM
11:10:00 AM
11:20:00 AM
11:30:00 AM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/17/2023 10:39:49 AM - 11:39:49 AM LAIeq=63.1 dB LAFmax=75.6 dB LCpeak=99.5 dB LAFmin=41.3 dB

LAKGREG_001 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	63.1	75.6	41.3
Time	10:39:49 AM	0:10:00				
Date	10/17/2023					



LAKGREG_001 Periodic reports



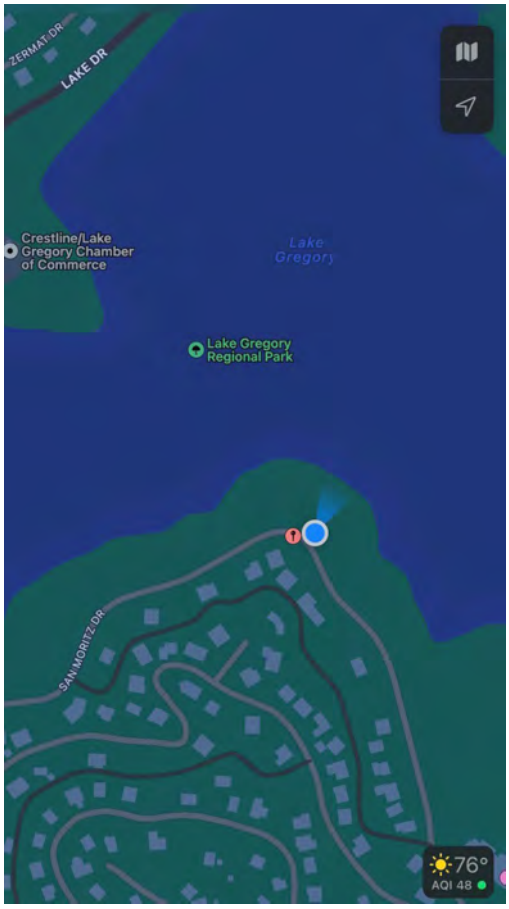
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.0%

Site Number: NM-2		
Recorded By: Darshan Shivaiah, Dennis Dinh		
Job Number: 195651		
Date: 10/17/2023		
Time: 10:58 a.m.		
Location: Across the street from 24539 San Moritz Drive		
Source of Ambient Noise: Traffic along San Moritz Drive		
Source of Peak Noise: Traffic along San Moritz Drive		
Noise Data		
L_{eq} (dB)	L_{max}(dB)	L_{min} (dB)
60.5	83.4	34.8

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	06/04/2023	
	Microphone	Brüel & Kjær	4189	3086765	06/04/2023	
	Preamp	Brüel & Kjær	ZC 0032	25380	06/04/2023	
	Calibrator	Brüel & Kjær	4231	2545667	06/04/2023	

Weather Data			
Est.	Duration: 10 minutes	Sky: Sunny	
	Note: dBA Offset = 0.00	Sensor Height (ft): 5 ft	
	Wind Ave Speed (mph / m/s)	Temperature (degrees Fahrenheit)	Barometer Pressure (inches)
	2 mph	75	29.91

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		10/17/2023 10:58:35
End Time:		10/17/2023 11:08:35
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.10

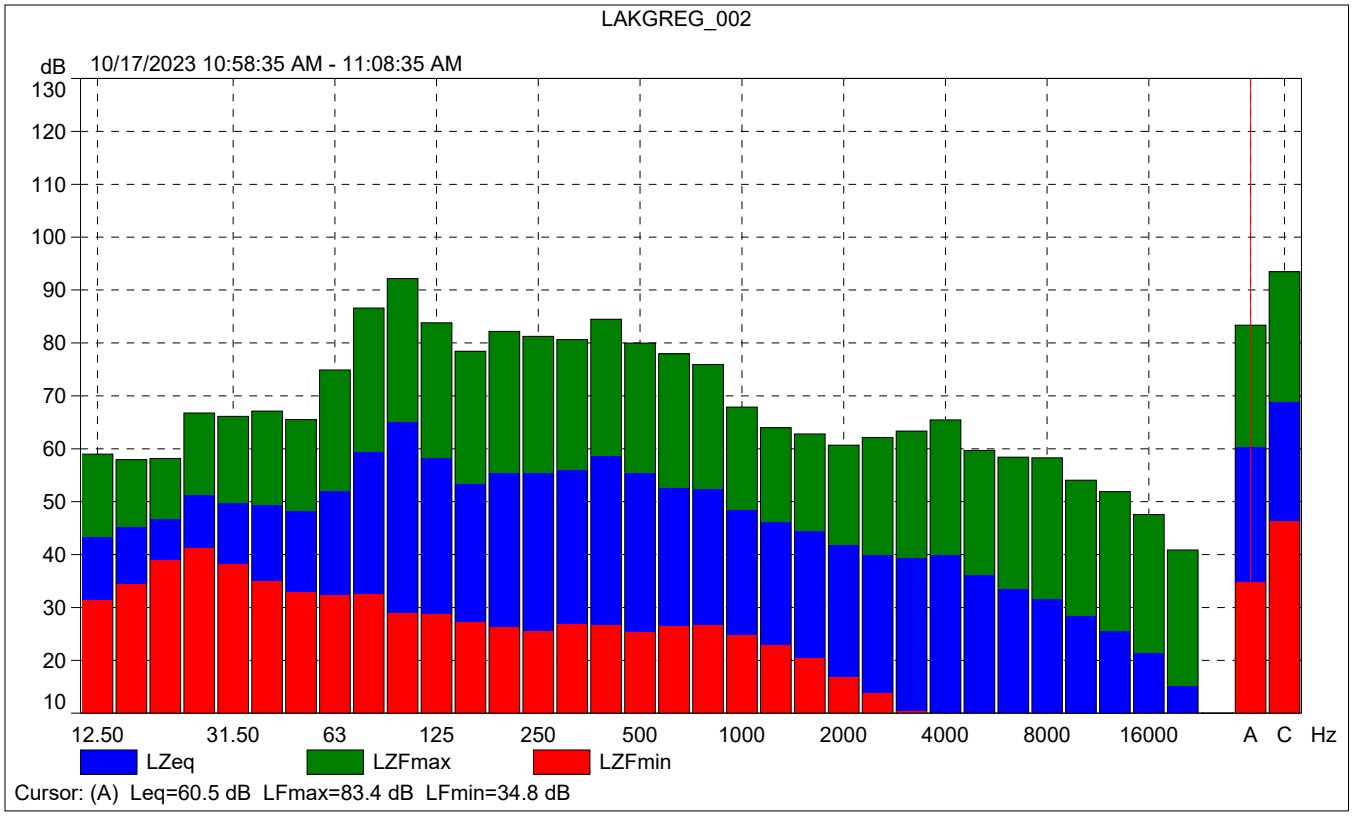
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

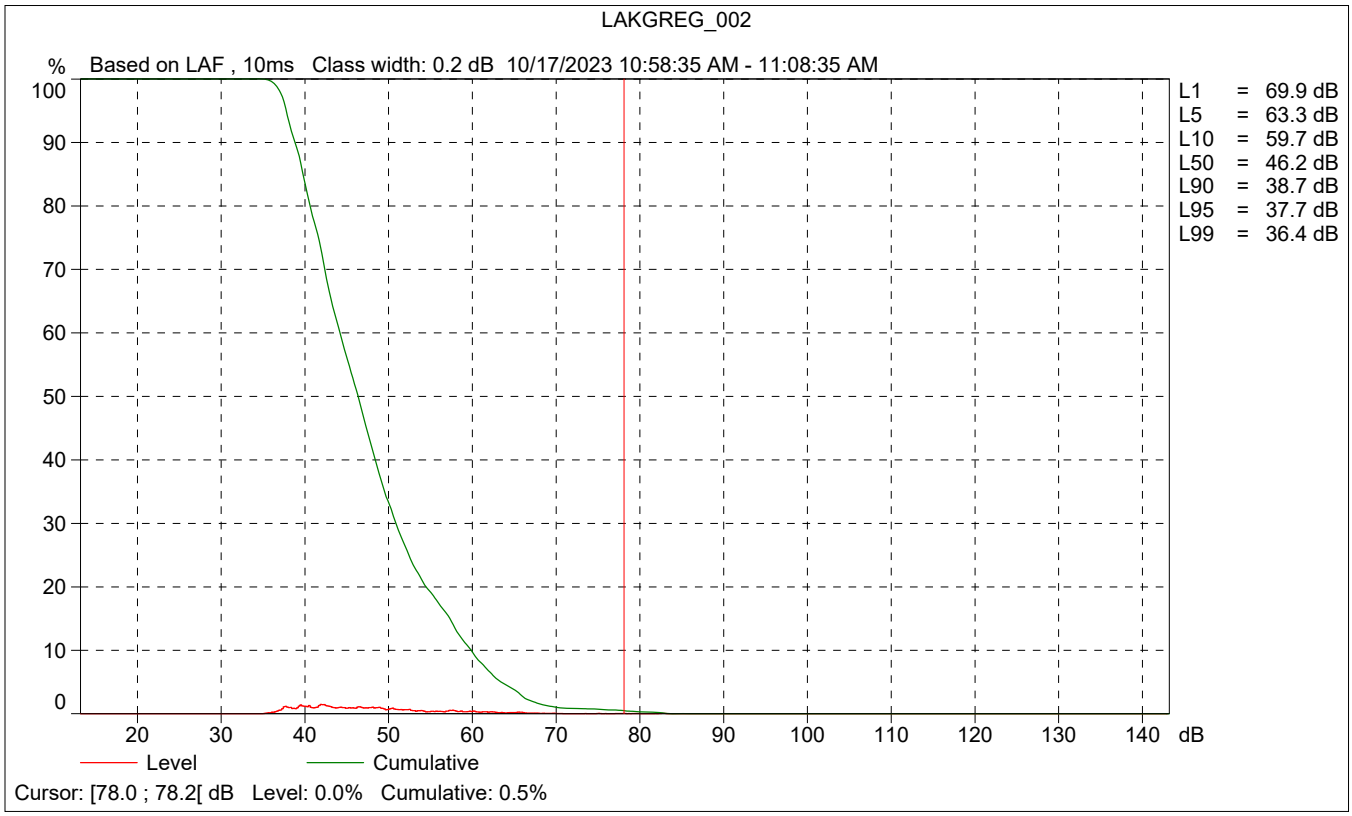
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

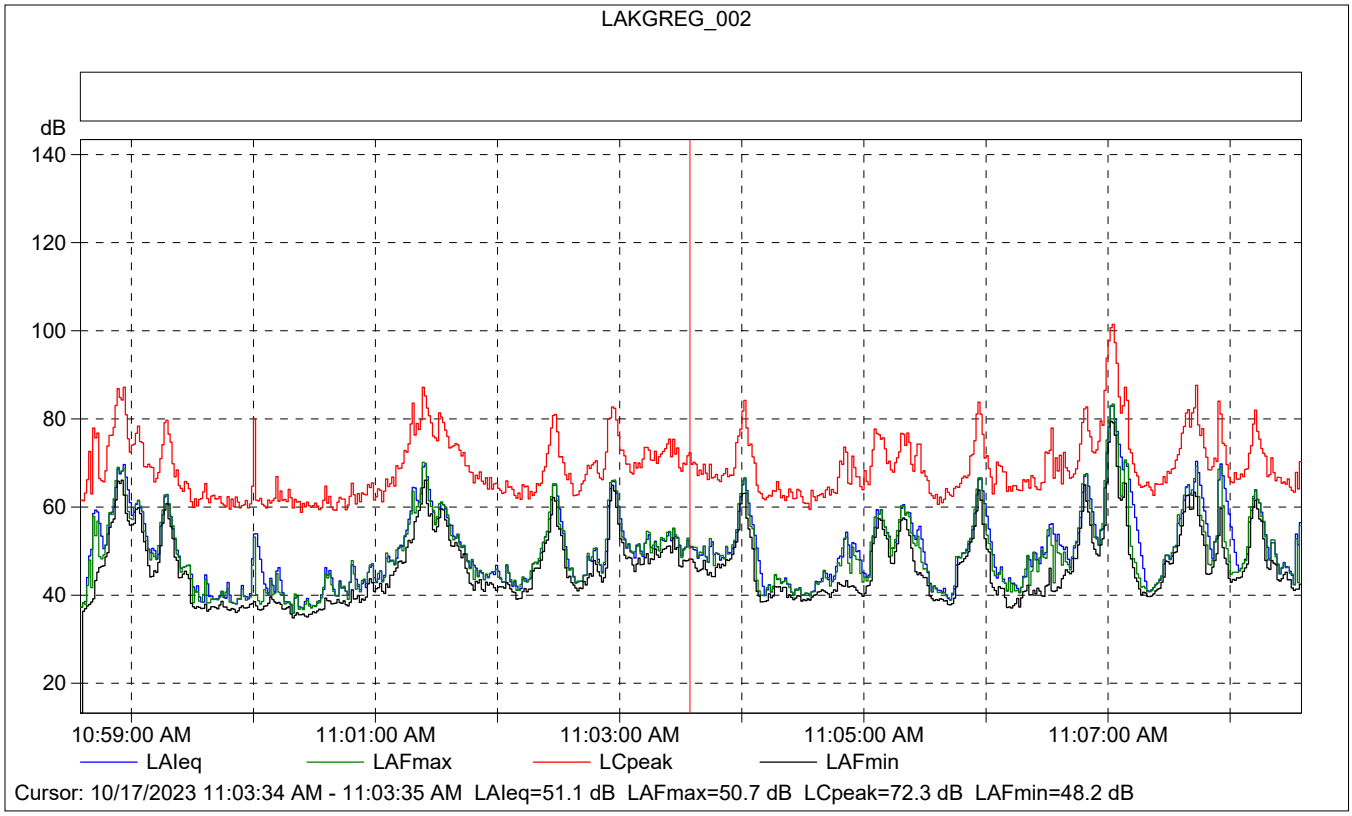
Calibration Time:		10/17/2023 10:39:03
Calibration Type:		External reference
Sensitivity:		43.7134429812431 mV/Pa

LAKGREG_002

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	60.5	83.4	34.8
Time	10:58:35 AM	11:08:35 AM	0:10:00				
Date	10/17/2023	10/17/2023					

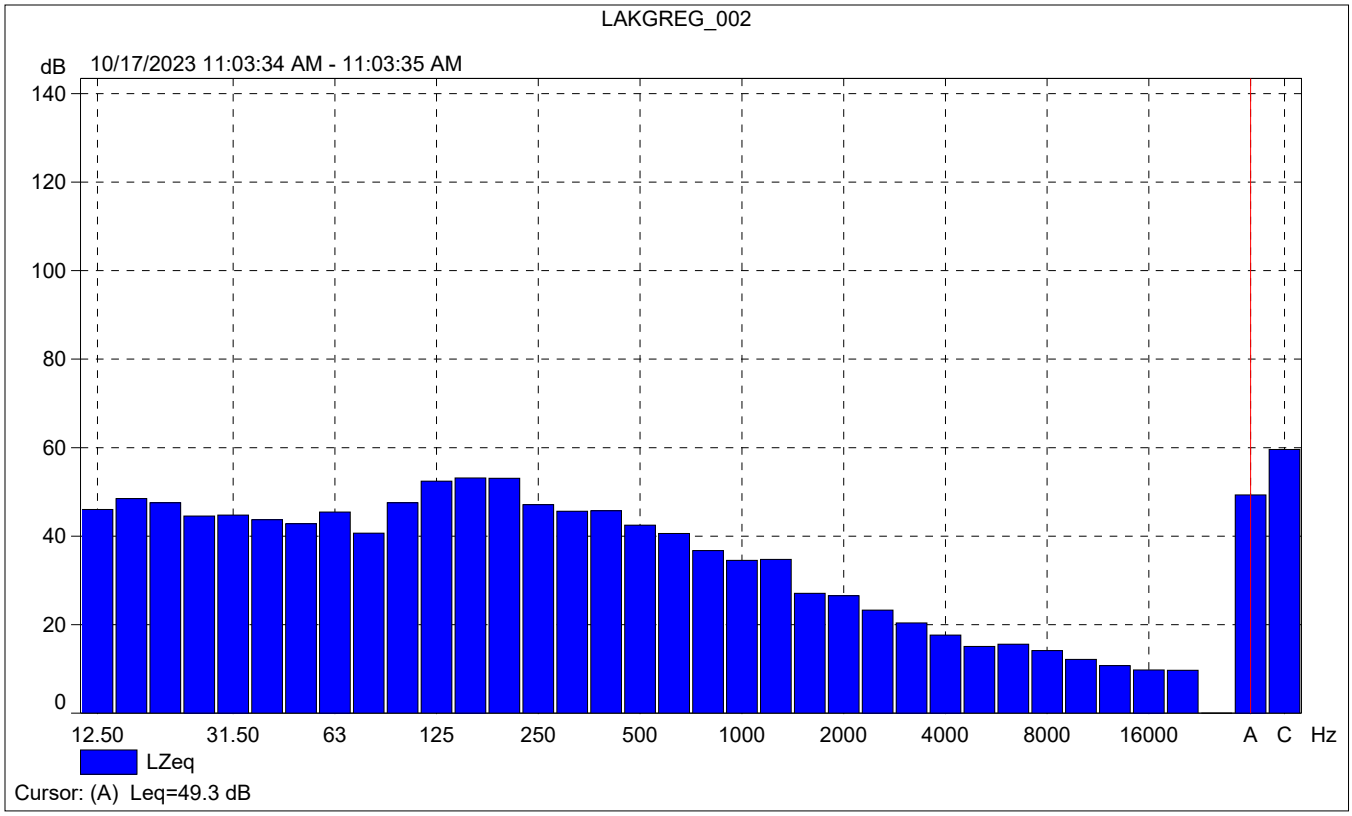

LAKGREG_002
dB
10/17/2023 10:58:35 AM - 11:08:35 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=60.5 dB LFmax=83.4 dB LFmin=34.8 dB

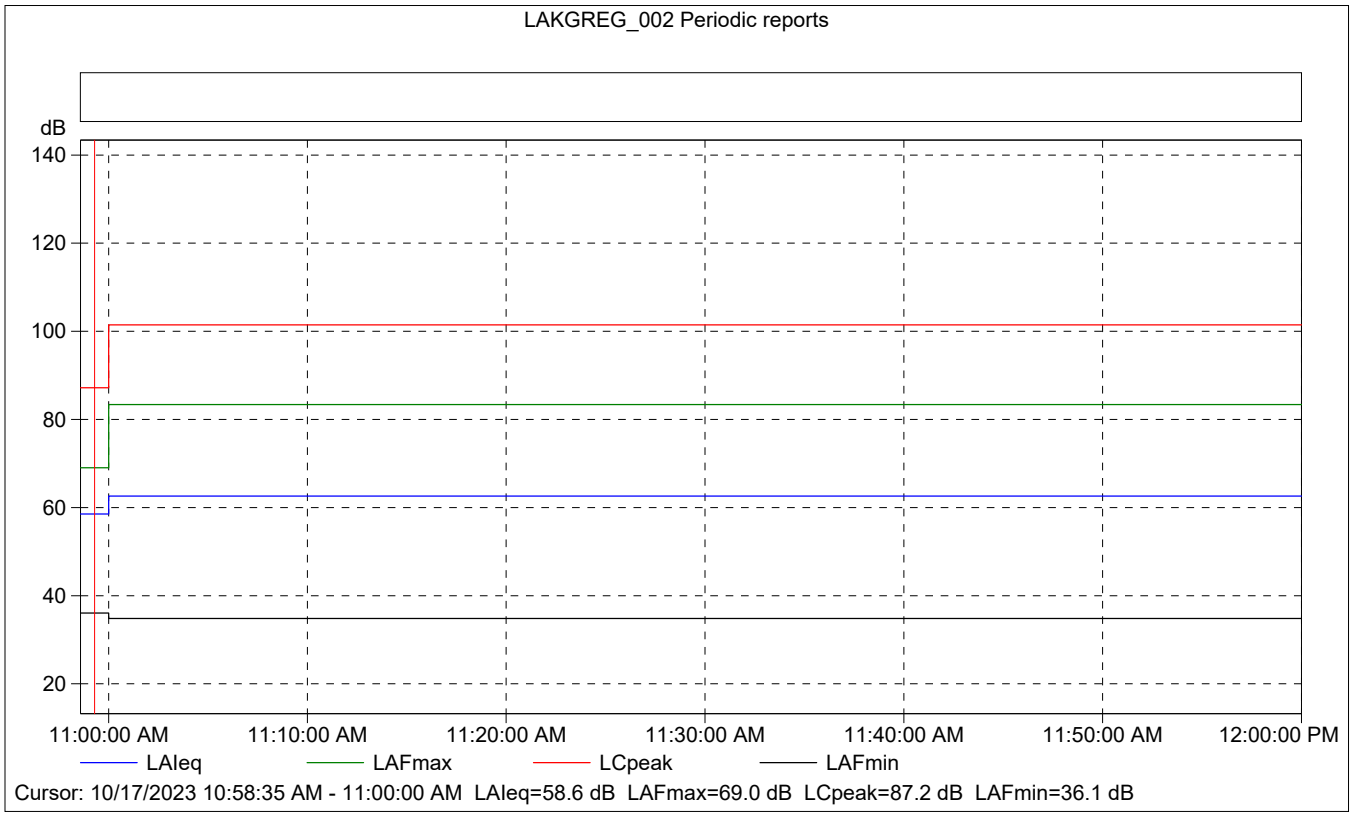

LAKGREG_002
%
Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 10:58:35 AM - 11:08:35 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 69.9 dB
L5 = 63.3 dB
L10 = 59.7 dB
L50 = 46.2 dB
L90 = 38.7 dB
L95 = 37.7 dB
L99 = 36.4 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.5%



LAKGREG_002

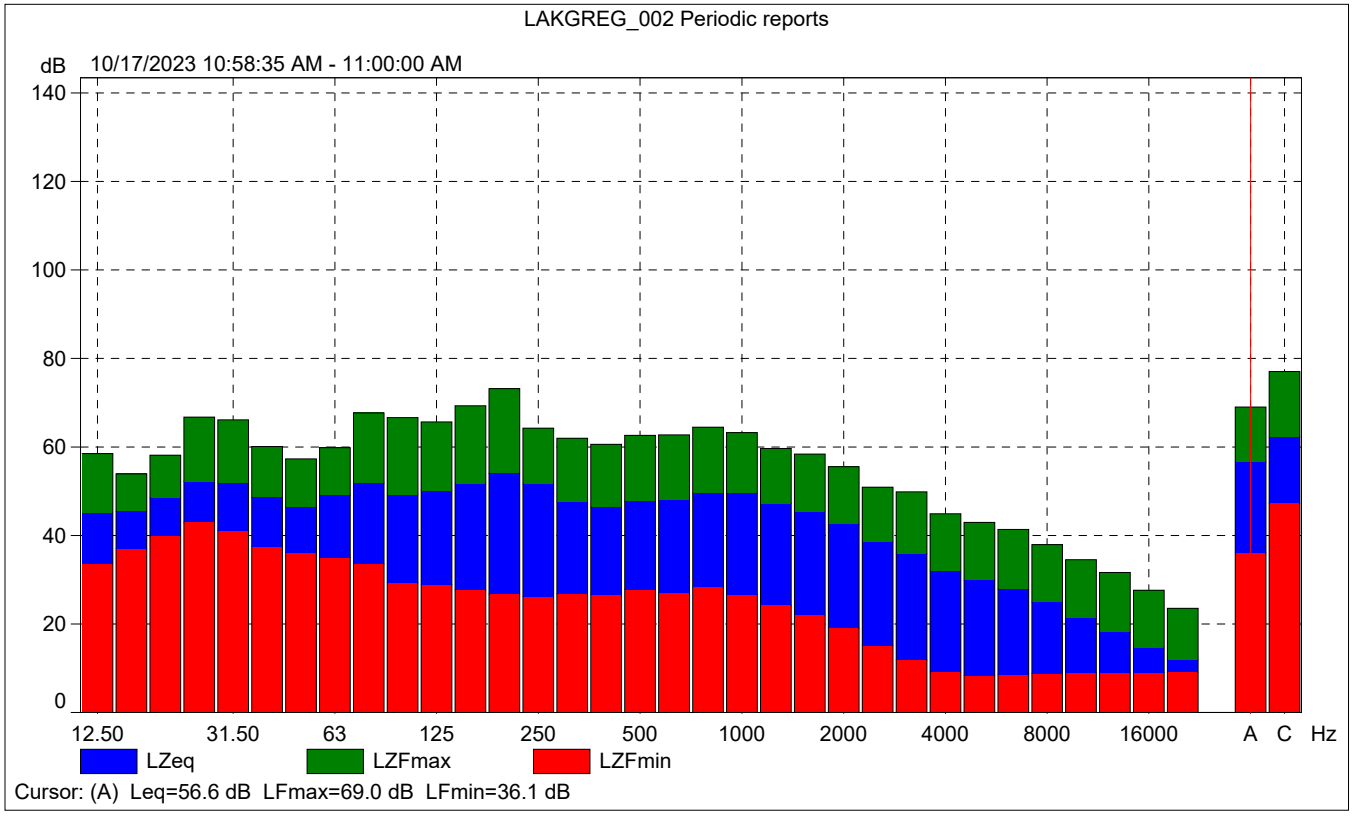
	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	51.1	50.7	48.2
Time	11:03:34 AM	0:00:01				
Date	10/17/2023					

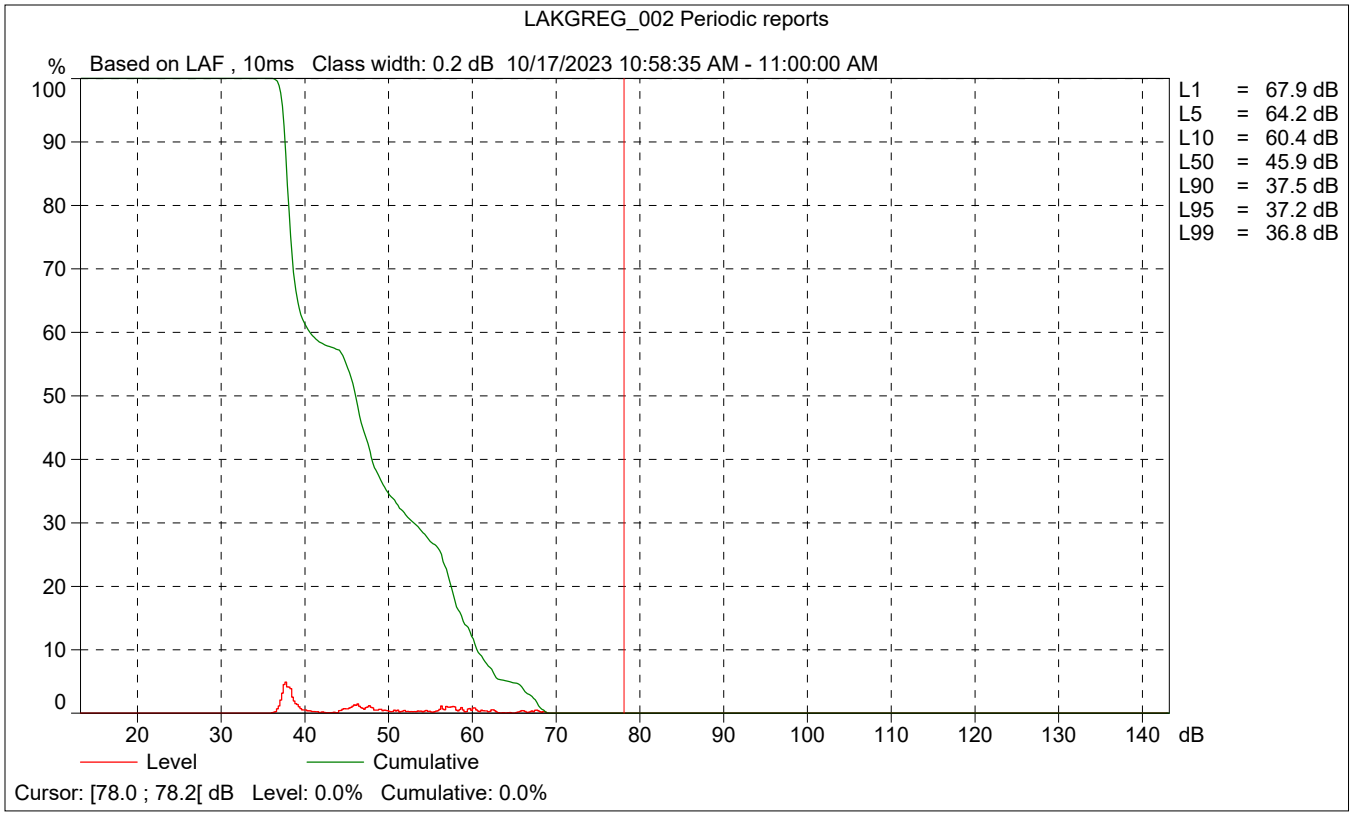

LAKGREG_002
dB
10/17/2023 11:03:34 AM - 11:03:35 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=49.3 dB


LAKGREG_002 Periodic reports
dB
140
120
100
80
60
40
20
11:00:00 AM
11:10:00 AM
11:20:00 AM
11:30:00 AM
11:40:00 AM
11:50:00 AM
12:00:00 PM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/17/2023 10:58:35 AM - 11:00:00 AM LAIeq=58.6 dB LAFmax=69.0 dB LCpeak=87.2 dB LAFmin=36.1 dB

LAKGREG_002 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	58.6	69.0	36.1
Time	10:58:35 AM	0:01:25				
Date	10/17/2023					



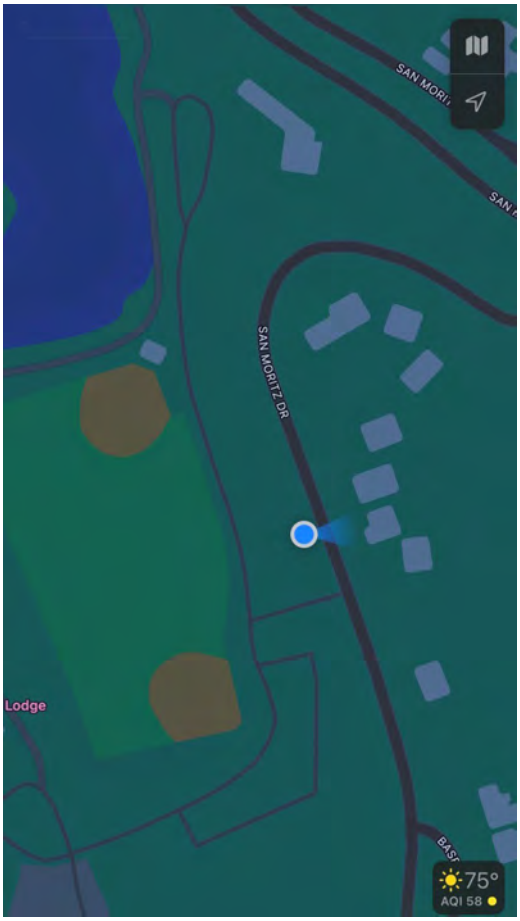

LAKGREG_002 Periodic reports
% Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 10:58:35 AM - 11:00:00 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 67.9 dB
L5 = 64.2 dB
L10 = 60.4 dB
L50 = 45.9 dB
L90 = 37.5 dB
L95 = 37.2 dB
L99 = 36.8 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.0%

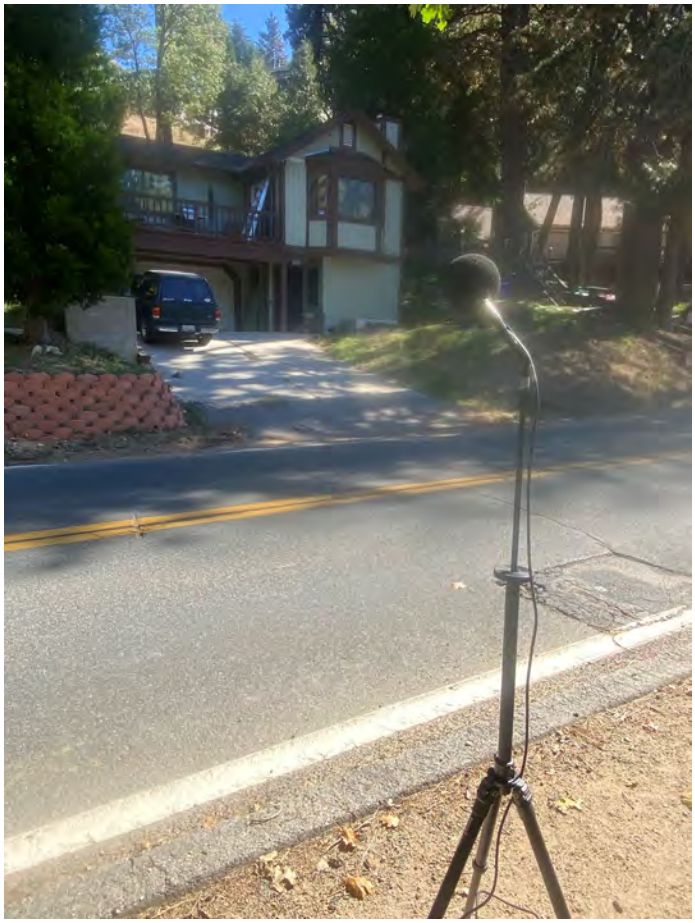
Site Number: NM-3		
Recorded By: Darshan Shivaiah, Dennis Dinh		
Job Number: 195651		
Date: 10/17/2023		
Time: 11:15 a.m.		
Location: Across the street from 24645 San Moritz Drive		
Source of Ambient Noise: Traffic along San Moritz Drive		
Source of Peak Noise: Traffic along San Moritz Drive		
Noise Data		
L_{eq} (dB)	L_{max}(dB)	L_{min} (dB)
55.2	76.6	32.5

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	06/04/2023	
	Microphone	Brüel & Kjær	4189	3086765	06/04/2023	
	Preamp	Brüel & Kjær	ZC 0032	25380	06/04/2023	
	Calibrator	Brüel & Kjær	4231	2545667	06/04/2023	

Weather Data			
Est.	Duration: 10 minutes	Sky: Sunny	
	Note: dBA Offset = 0.00	Sensor Height (ft): 5 ft	
	Wind Ave Speed (mph / m/s)	Temperature (degrees Fahrenheit)	Barometer Pressure (inches)
	2 mph	75	29.91

Photo of Measurement Location





2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		10/17/2023 11:15:18
End Time:		10/17/2023 11:25:18
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.10

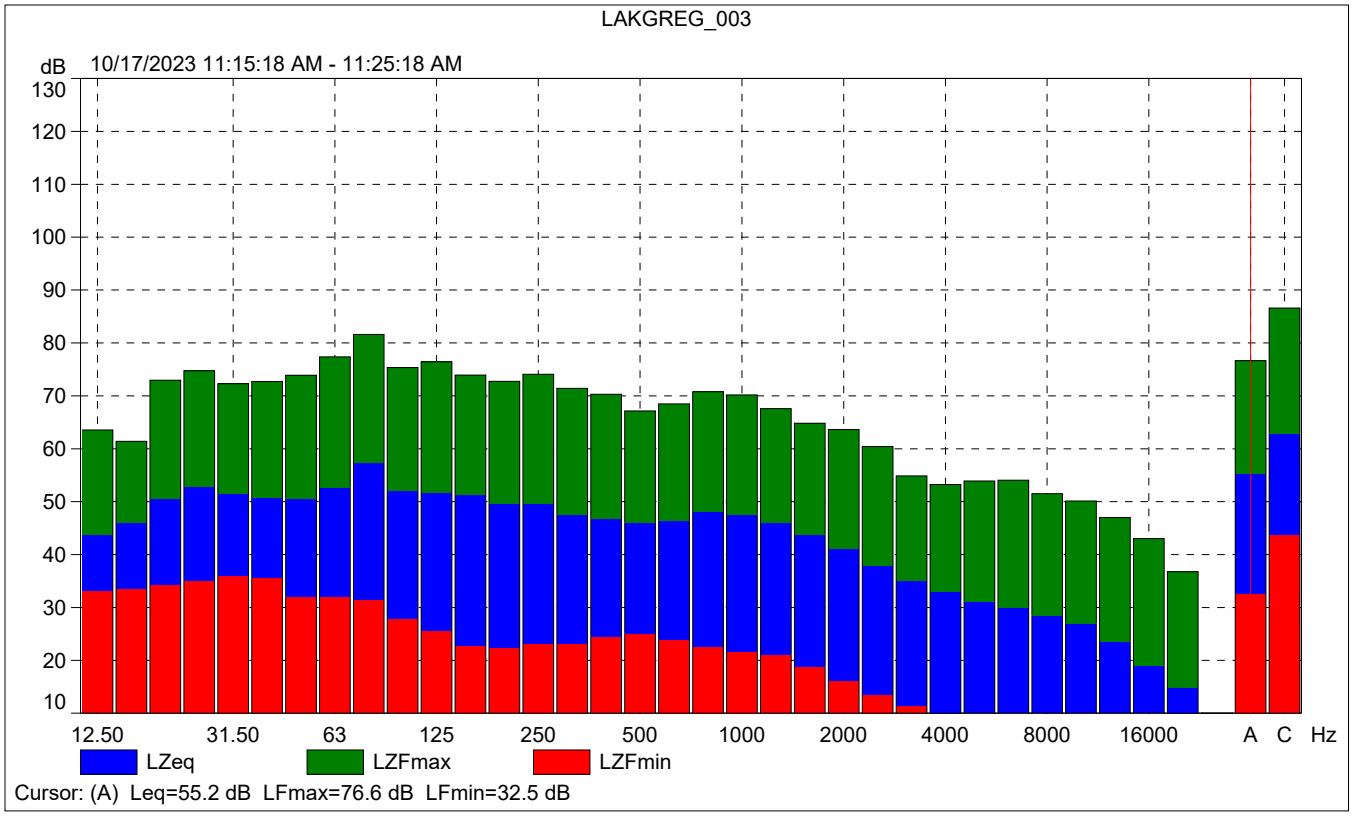
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

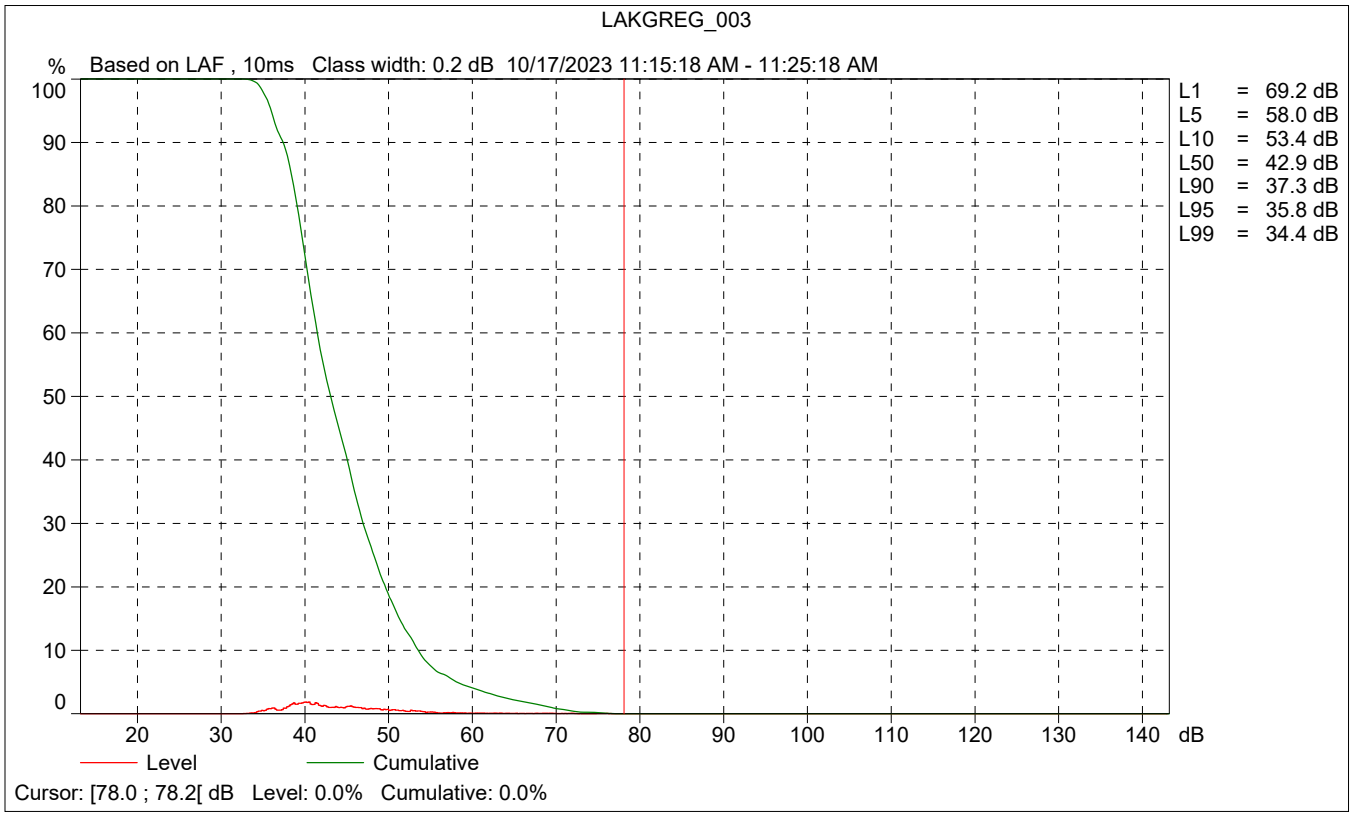
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

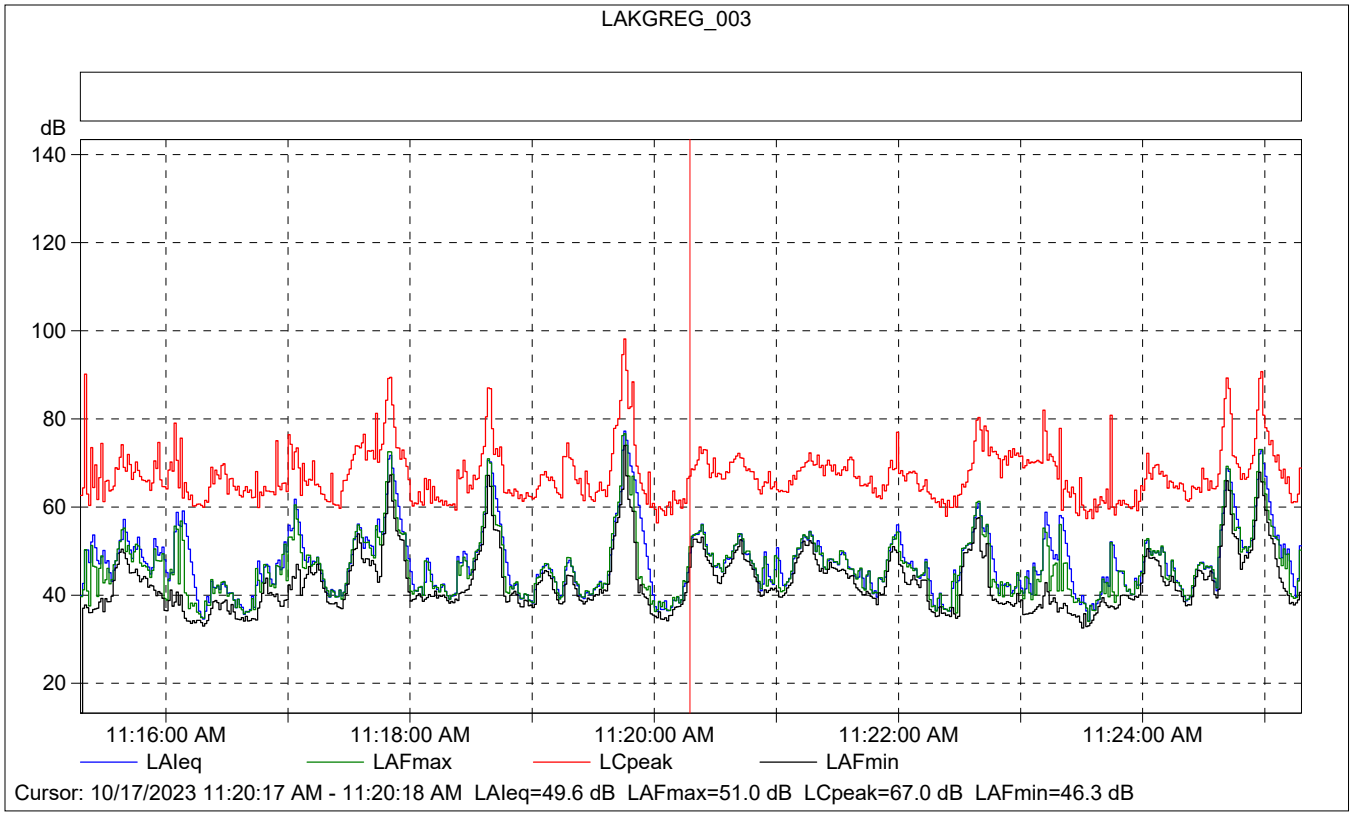
Calibration Time:		10/17/2023 10:39:03
Calibration Type:		External reference
Sensitivity:		43.7134429812431 mV/Pa

LAKGREG_003

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	55.2	76.6	32.5
Time	11:15:18 AM	11:25:18 AM	0:10:00				
Date	10/17/2023	10/17/2023					

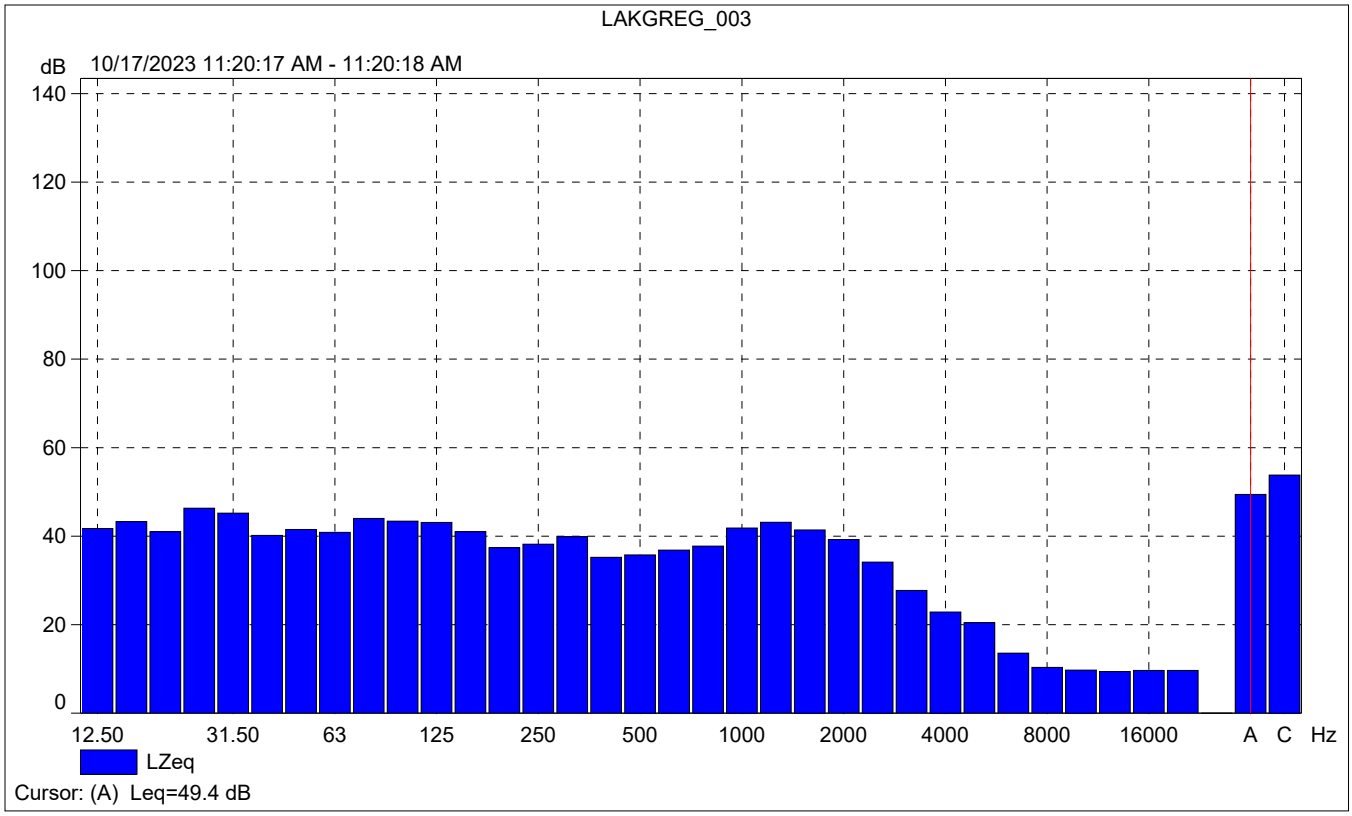

LAKGREG_003
dB
10/17/2023 11:15:18 AM - 11:25:18 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=55.2 dB LFmax=76.6 dB LFmin=32.5 dB

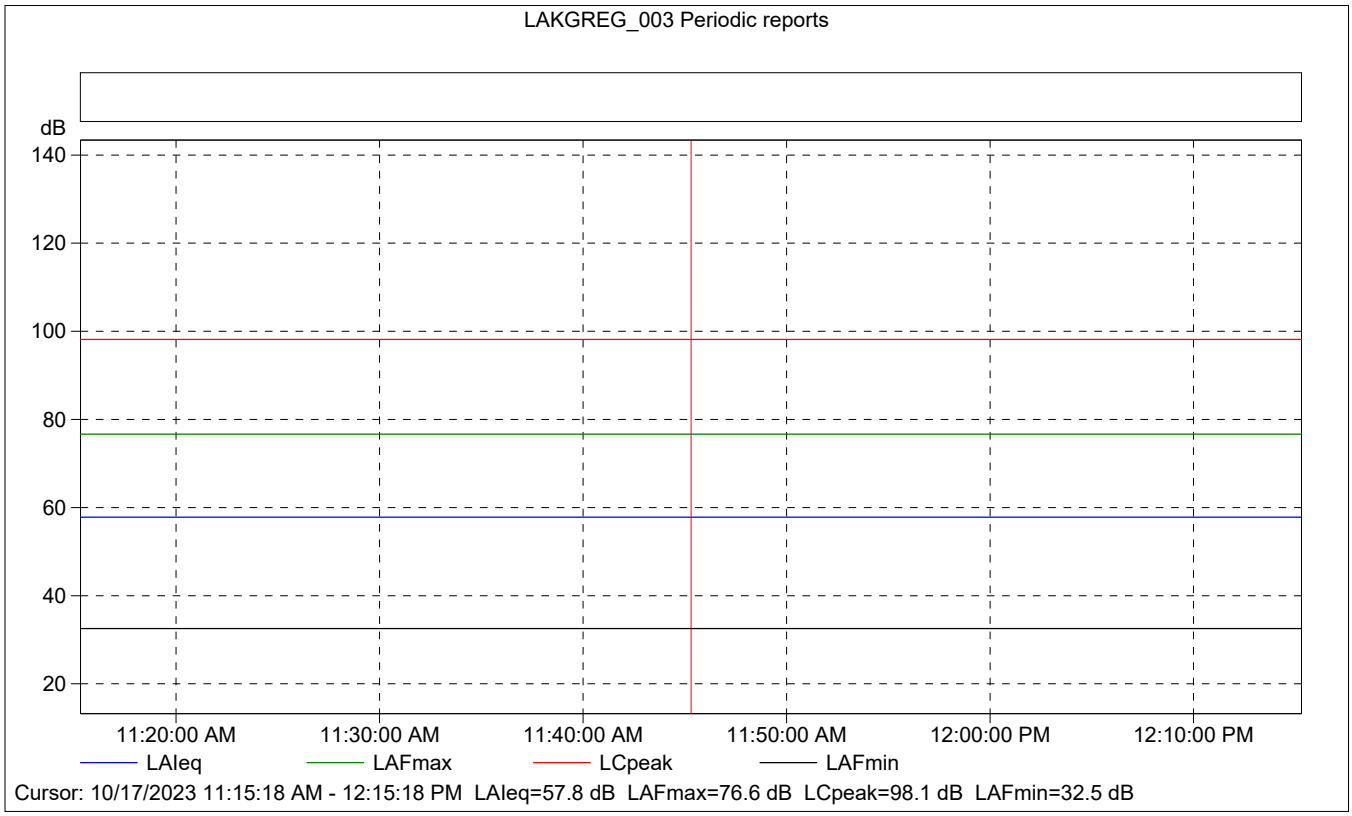

LAKGREG_003
%
Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 11:15:18 AM - 11:25:18 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 69.2 dB
L5 = 58.0 dB
L10 = 53.4 dB
L50 = 42.9 dB
L90 = 37.3 dB
L95 = 35.8 dB
L99 = 34.4 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.0%



LAKGREG_003

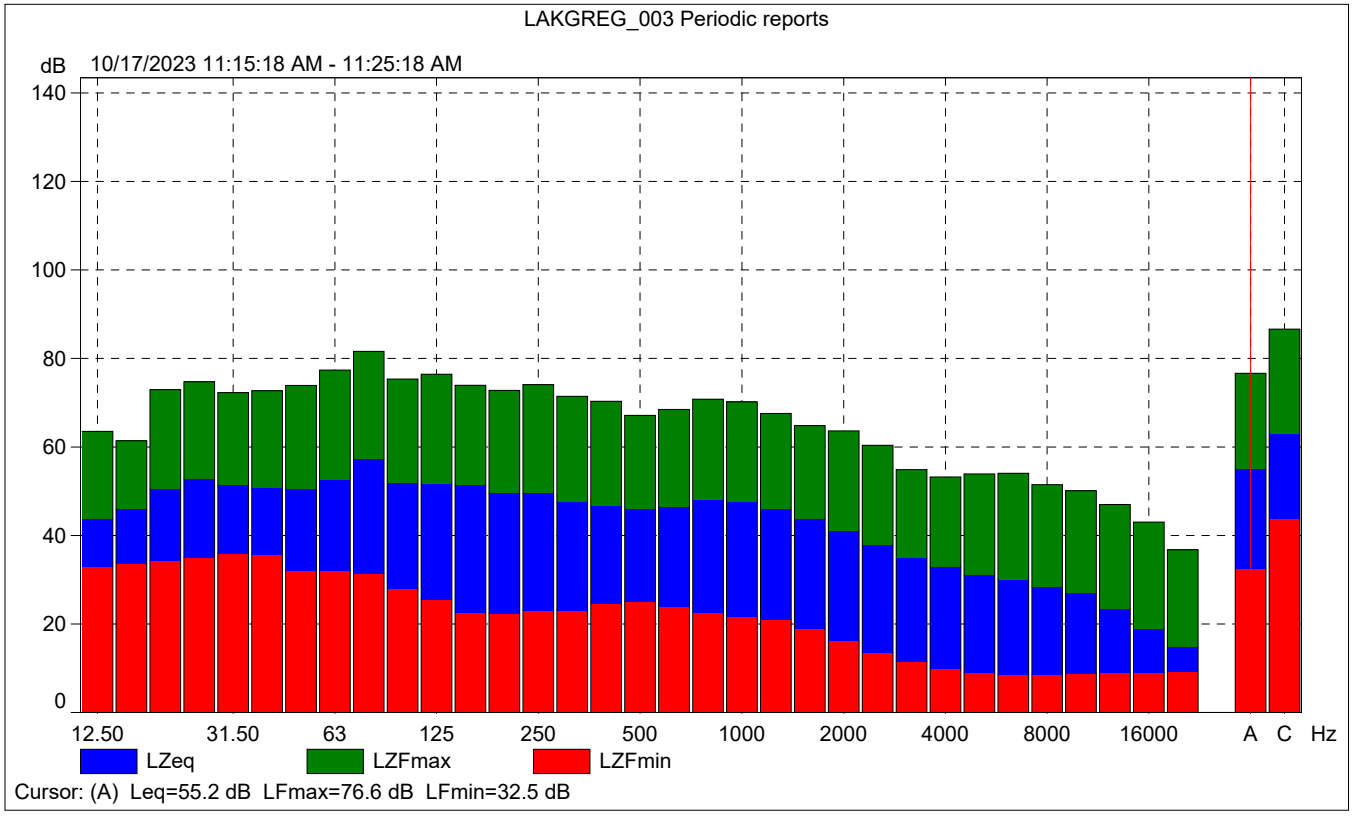
	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	49.6	51.0	46.3
Time	11:20:17 AM	0:00:01				
Date	10/17/2023					

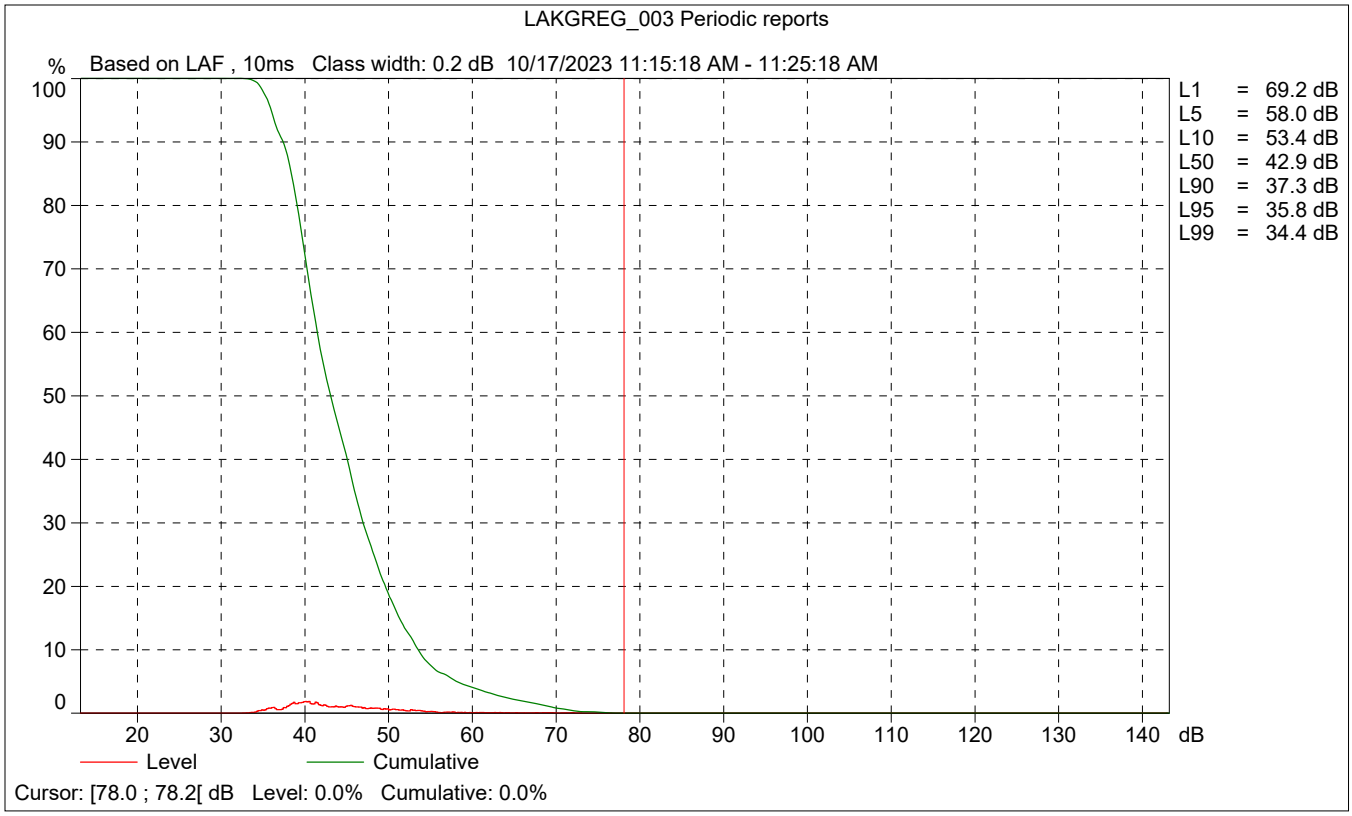

LAKGREG_003
dB
10/17/2023 11:20:17 AM - 11:20:18 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=49.4 dB


LAKGREG_003 Periodic reports
dB
140
120
100
80
60
40
20
11:20:00 AM
11:30:00 AM
11:40:00 AM
11:50:00 AM
12:00:00 PM
12:10:00 PM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/17/2023 11:15:18 AM - 12:15:18 PM LAIeq=57.8 dB LAFmax=76.6 dB LCpeak=98.1 dB LAFmin=32.5 dB

LAKGREG_003 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	57.8	76.6	32.5
Time	11:15:18 AM	0:10:00				
Date	10/17/2023					



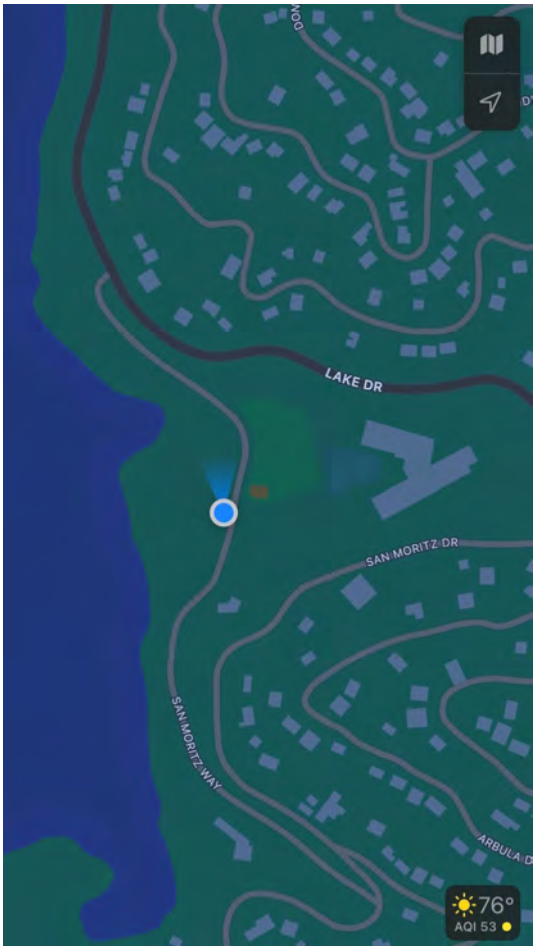

LAKGREG_003 Periodic reports
% Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 11:15:18 AM - 11:25:18 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 69.2 dB
L5 = 58.0 dB
L10 = 53.4 dB
L50 = 42.9 dB
L90 = 37.3 dB
L95 = 35.8 dB
L99 = 34.4 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.0%

Site Number: NM-4		
Recorded By: Darshan Shivaiah, Dennis Dinh		
Job Number: 195651		
Date: 10/17/2023		
Time: 11:32 a.m.		
Location: Across the street from Lake Gregory Community Center		
Source of Ambient Noise: Traffic along San Moritz Drive		
Source of Peak Noise: Traffic along San Moritz Drive		
Noise Data		
L_{eq} (dB)	L_{max}(dB)	L_{min} (dB)
56.4	79.9	33.2

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	06/04/2023	
	Microphone	Brüel & Kjær	4189	3086765	06/04/2023	
	Preamp	Brüel & Kjær	ZC 0032	25380	06/04/2023	
	Calibrator	Brüel & Kjær	4231	2545667	06/04/2023	

Weather Data			
Est.	Duration: 10 minutes		Sky: Sunny
	Note: dBA Offset = 0.00		Sensor Height (ft): 5 ft
	Wind Ave Speed (mph / m/s)	Temperature (degrees Fahrenheit)	Barometer Pressure (inches)
	2 mph	75	29.91

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		10/17/2023 11:32:39
End Time:		10/17/2023 11:42:39
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.10

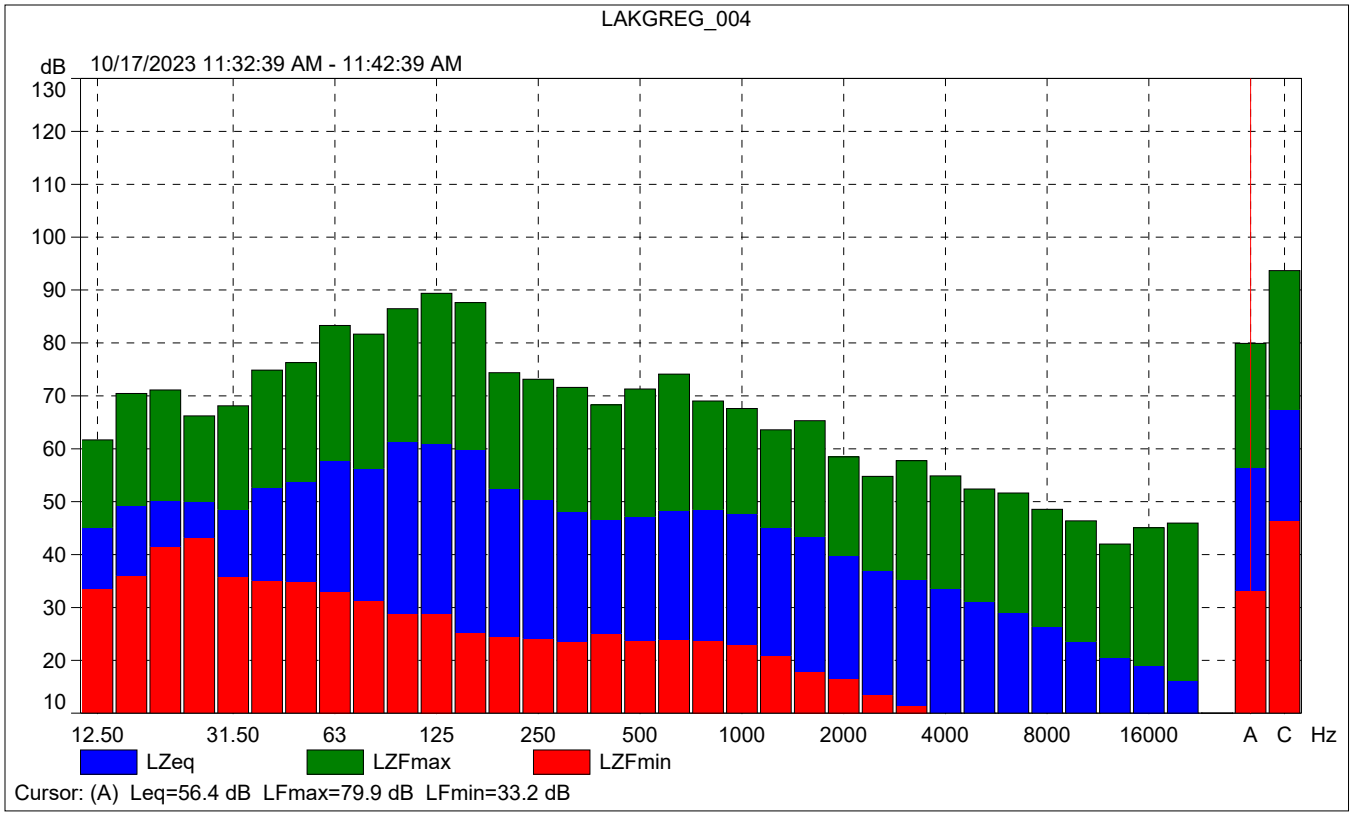
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

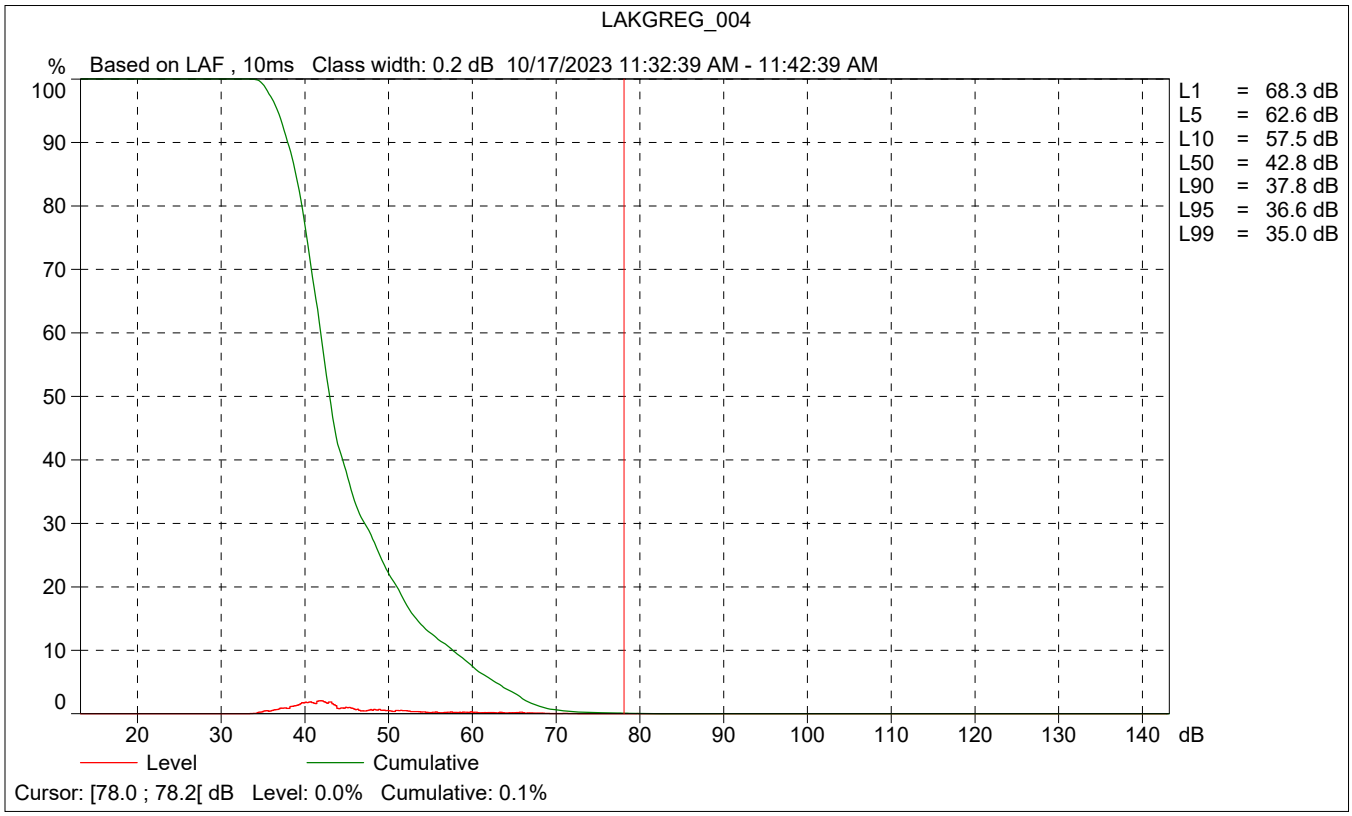
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

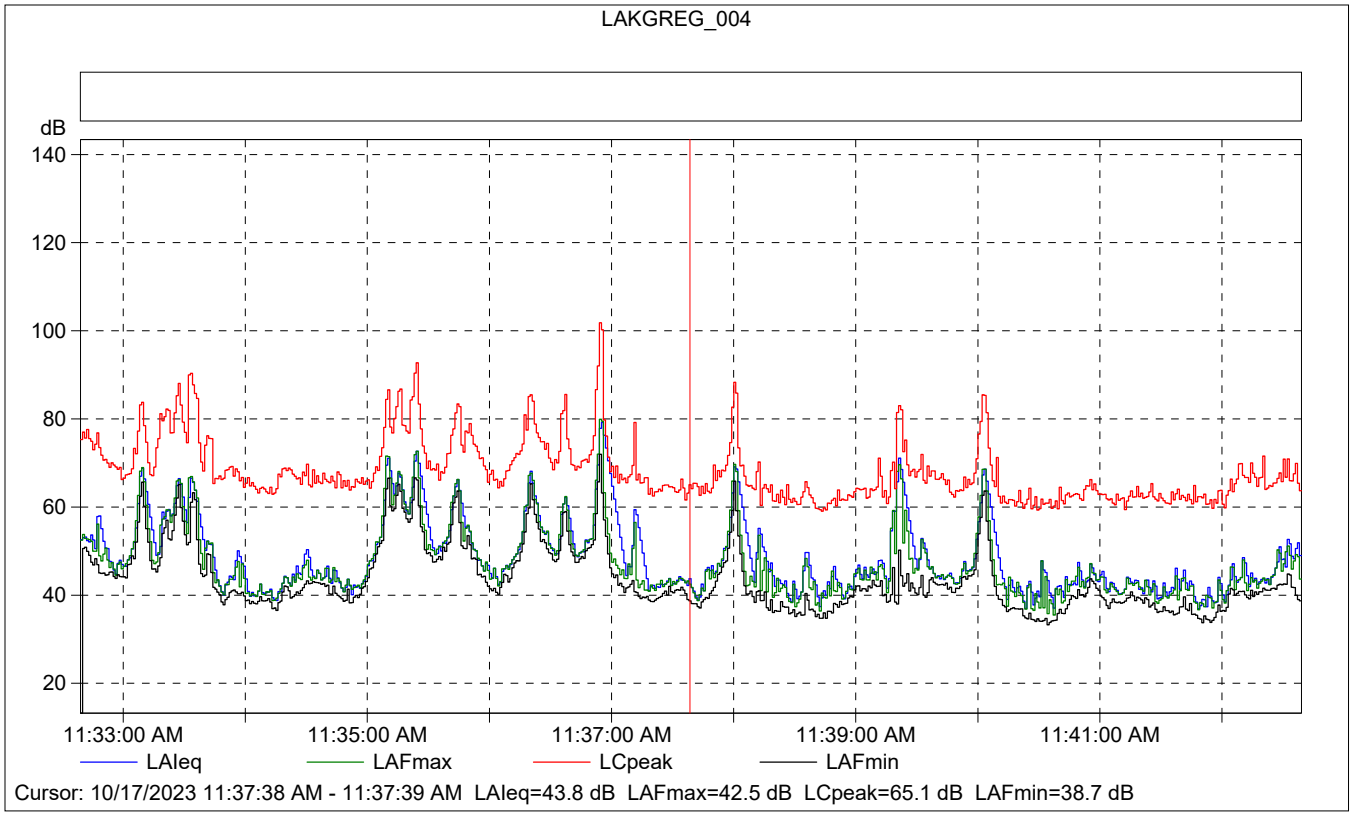
Calibration Time:		10/17/2023 10:39:03
Calibration Type:		External reference
Sensitivity:		43.7134429812431 mV/Pa

LAKGREG_004

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	56.4	79.9	33.2
Time	11:32:39 AM	11:42:39 AM	0:10:00				
Date	10/17/2023	10/17/2023					

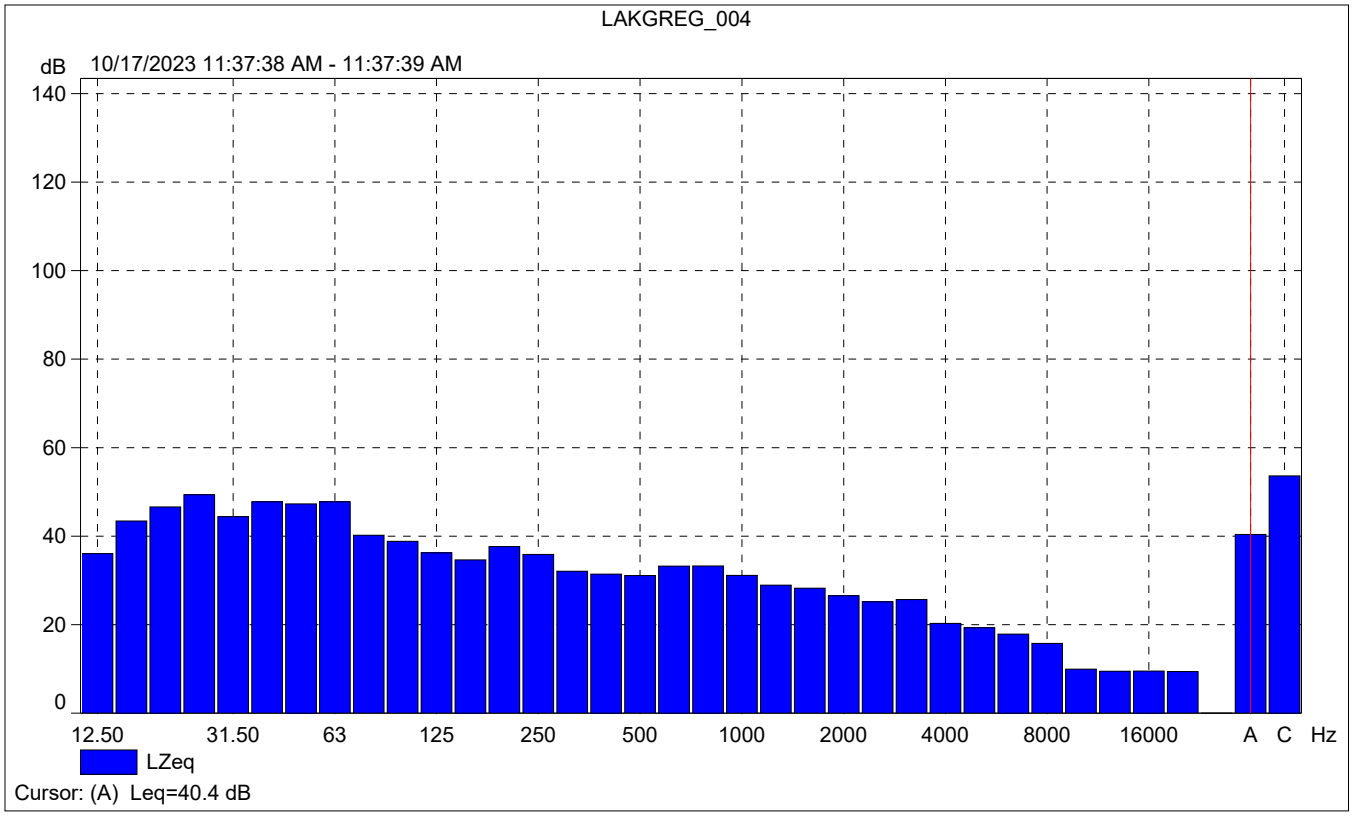

LAKGREG_004
dB
10/17/2023 11:32:39 AM - 11:42:39 AM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=56.4 dB LFmax=79.9 dB LFmin=33.2 dB

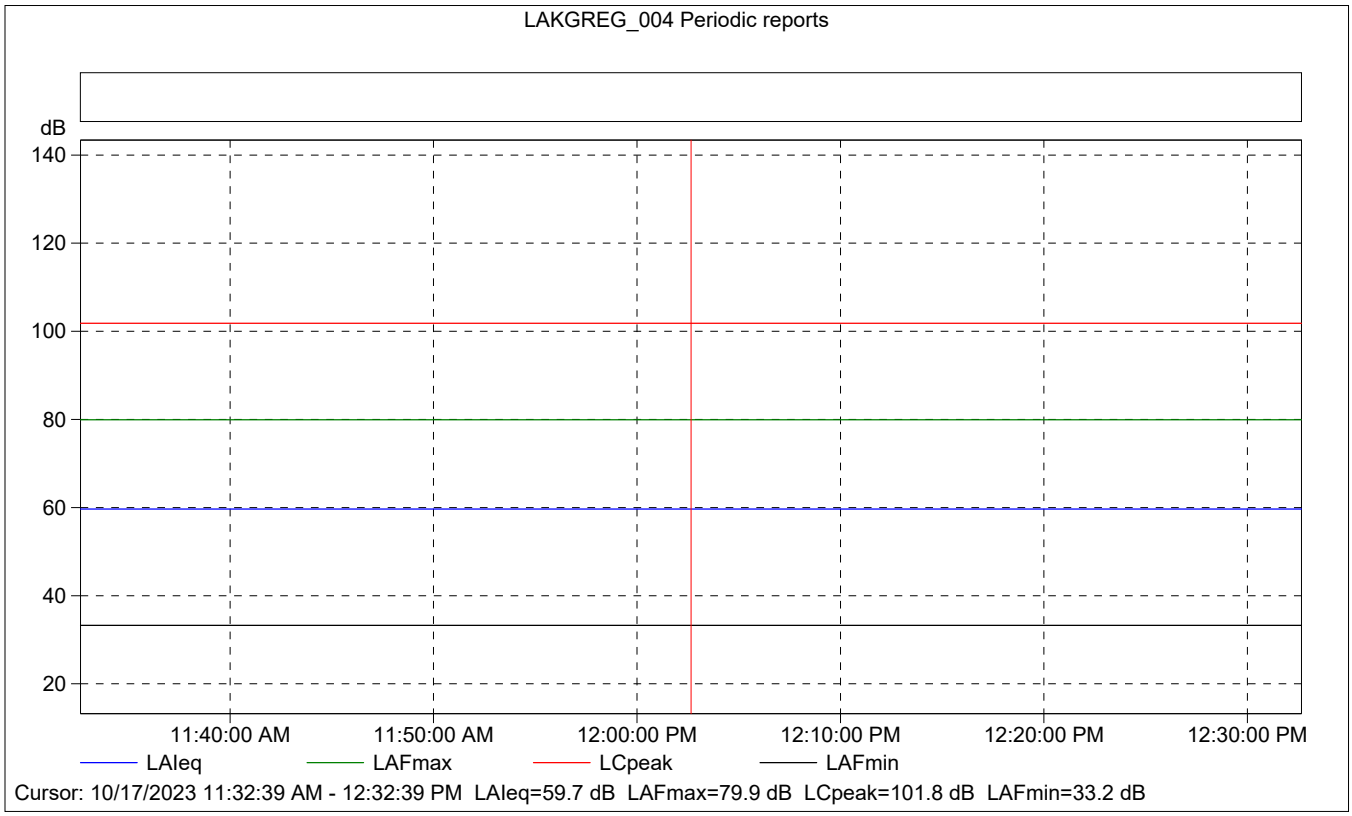

LAKGREG_004
%
Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 11:32:39 AM - 11:42:39 AM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 68.3 dB
L5 = 62.6 dB
L10 = 57.5 dB
L50 = 42.8 dB
L90 = 37.8 dB
L95 = 36.6 dB
L99 = 35.0 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.1%



LAKGREG_004

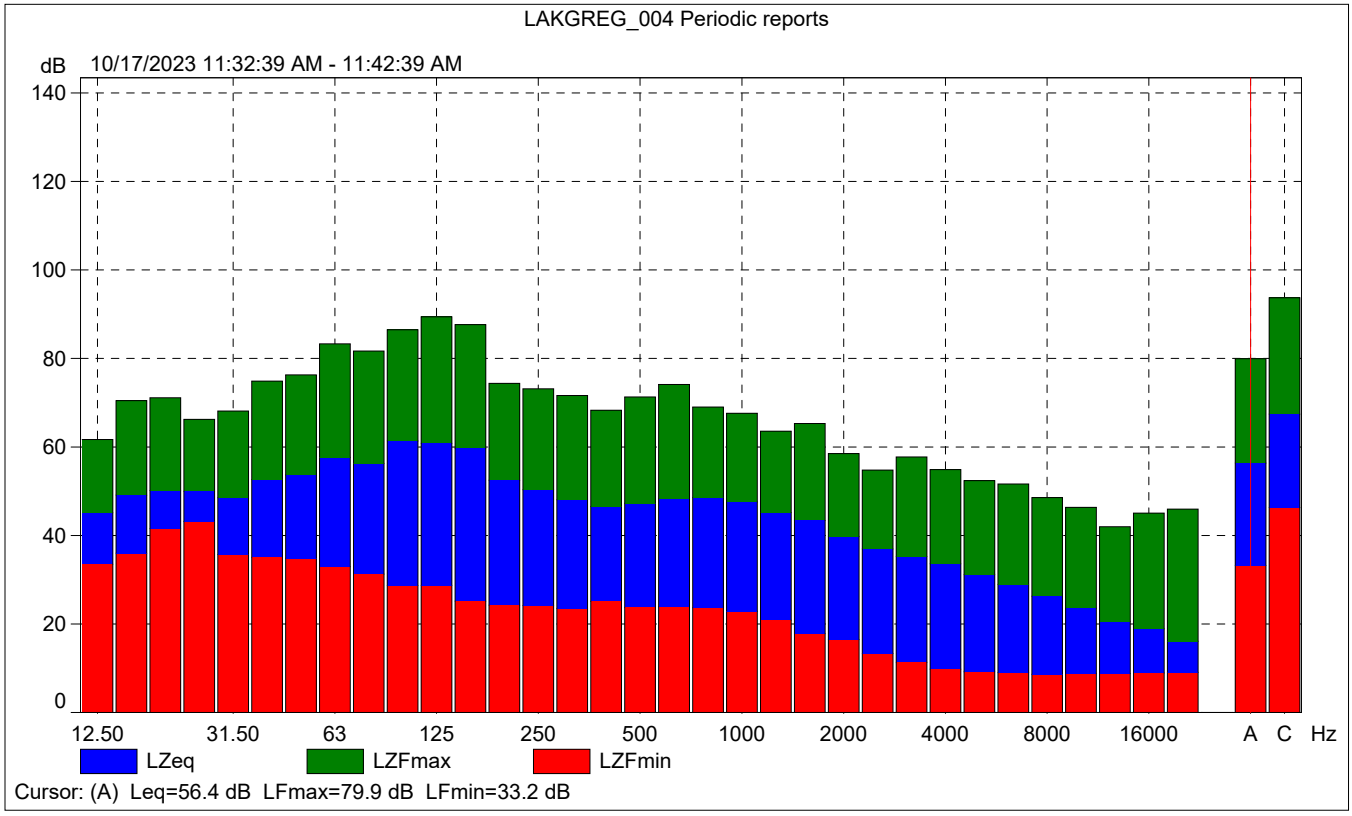
	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	43.8	42.5	38.7
Time	11:37:38 AM	0:00:01				
Date	10/17/2023					


LAKGREG_004
dB
10/17/2023 11:37:38 AM - 11:37:39 AM
140
120
100
80
60
40
20
0
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
Cursor: (A) Leq=40.4 dB

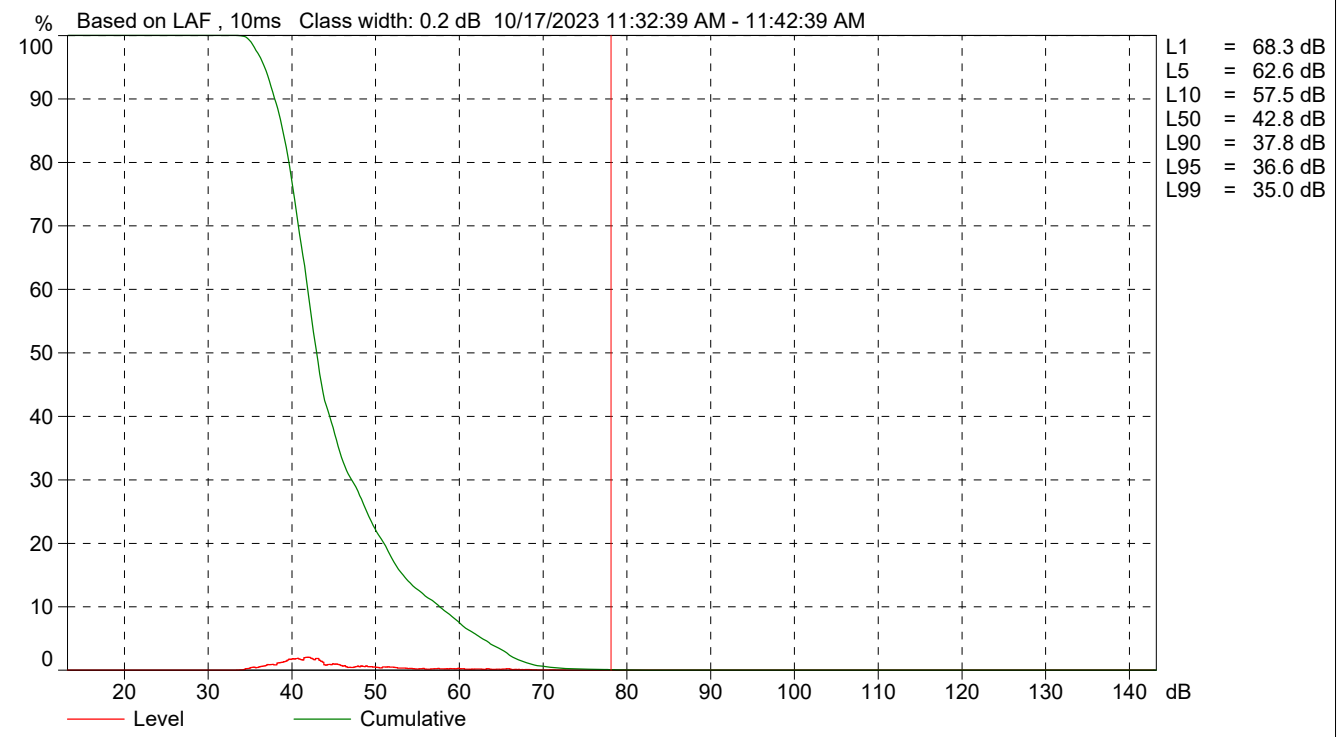

LAKGREG_004 Periodic reports
dB
140
120
100
80
60
40
20
11:40:00 AM
11:50:00 AM
12:00:00 PM
12:10:00 PM
12:20:00 PM
12:30:00 PM
LAIeq
LAFmax
LCpeak
LAFmin
Cursor: 10/17/2023 11:32:39 AM - 12:32:39 PM LAIeq=59.7 dB LAFmax=79.9 dB LCpeak=101.8 dB LAFmin=33.2 dB

LAKGREG_004 Periodic reports

	Start time	Elapsed time	Overload [%]	LAIeq [dB]	LAFmax [dB]	LAFmin [dB]
Value			0.00	59.7	79.9	33.2
Time	11:32:39 AM	0:10:00				
Date	10/17/2023					



LAKGREG_004 Periodic reports



Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 0.1%

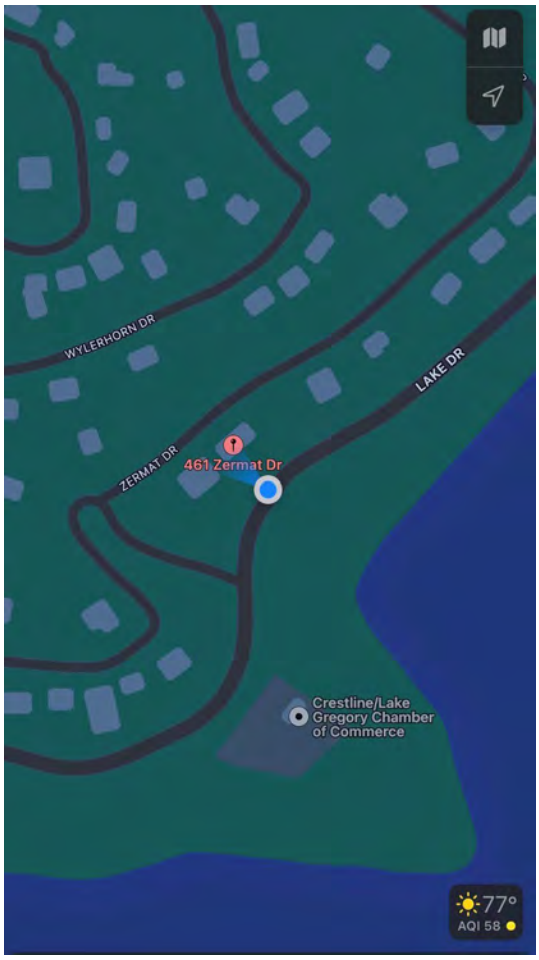
Site Number: NM-5	
Recorded By: Darshan Shivaiah, Dennis Dinh	
Job Number: 195651	
Date: 10/17/2023	
Time: 11:50 a.m.	
Location: In front of 461 Zermatt Drive	
Source of Ambient Noise: Traffic along Lake Drive	
Source of Peak Noise: Traffic along Lake Drive	

Noise Data		
L_{eq} (dB)	L_{max}(dB)	L_{min} (dB)
66.0	85.0	35.7

Equipment						
Category	Type	Vendor	Model	Serial No.	Cert. Date	Note
Sound	Sound Level Meter	Brüel & Kjær	2250	3011133	06/04/2023	
	Microphone	Brüel & Kjær	4189	3086765	06/04/2023	
	Preamp	Brüel & Kjær	ZC 0032	25380	06/04/2023	
	Calibrator	Brüel & Kjær	4231	2545667	06/04/2023	

Weather Data			
Est.	Duration: 10 minutes		Sky: Sunny
	Note: dBA Offset = 0.00		Sensor Height (ft): 5 ft
	Wind Ave Speed (mph / m/s)	Temperature (degrees Fahrenheit)	Barometer Pressure (inches)
	2 mph	75	29.91

Photo of Measurement Location



2250

Instrument:		2250
Application:		BZ7225 Version 4.7.6
Start Time:		10/17/2023 11:50:11
End Time:		10/17/2023 12:00:11
Elapsed Time:		00:10:00
Bandwidth:		1/3-octave
Max Input Level:		142.10

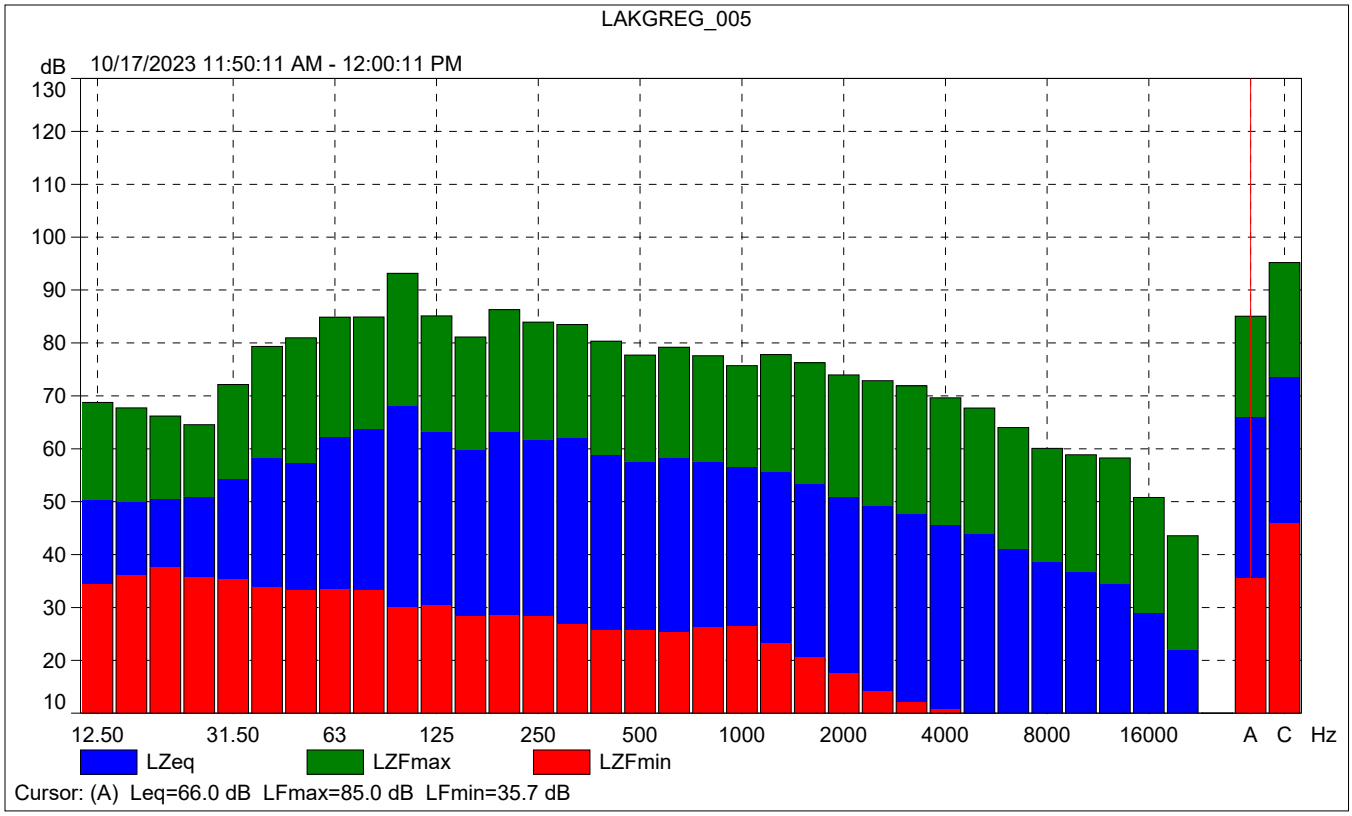
	Time	Frequency
Broadband (excl. Peak):	FSI	AC
Broadband Peak:		C
Spectrum:	FS	Z

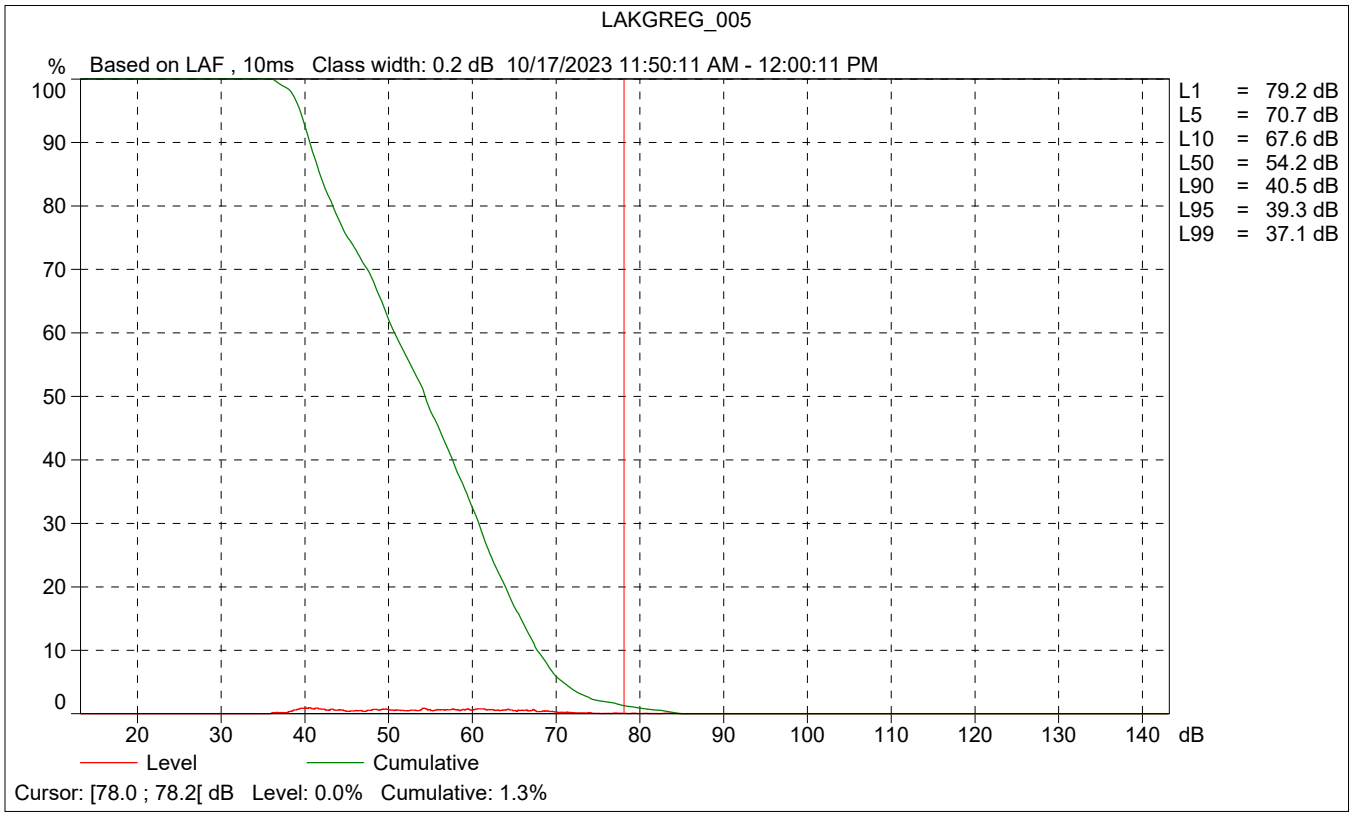
Instrument Serial Number:		3011133
Microphone Serial Number:		3086765
Input:		Top Socket
Windscreen Correction:		UA-1650
Sound Field Correction:		Free-field

Calibration Time:		10/17/2023 10:39:03
Calibration Type:		External reference
Sensitivity:		43.7134429812431 mV/Pa

LAKGREG_005

	Start time	End time	Elapsed time	Overload [%]	LAeq [dB]	LAFmax [dB]	LAFmin [dB]
Value				0.00	66.0	85.0	35.7
Time	11:50:11 AM	12:00:11 PM	0:10:00				
Date	10/17/2023	10/17/2023					


LAKGREG_005
dB
10/17/2023 11:50:11 AM - 12:00:11 PM
130
120
110
100
90
80
70
60
50
40
30
20
10
12.50
31.50
63
125
250
500
1000
2000
4000
8000
16000
A
C
Hz
LZeq
LZFmax
LZFmin
Cursor: (A) Leq=66.0 dB LFmax=85.0 dB LFmin=35.7 dB


LAKGREG_005
%
Based on LAF , 10ms Class width: 0.2 dB 10/17/2023 11:50:11 AM - 12:00:11 PM
100
90
80
70
60
50
40
30
20
10
0
20
30
40
50
60
70
80
90
100
110
120
130
140
dB
L1 = 79.2 dB
L5 = 70.7 dB
L10 = 67.6 dB
L50 = 54.2 dB
L90 = 40.5 dB
L95 = 39.3 dB
L99 = 37.1 dB
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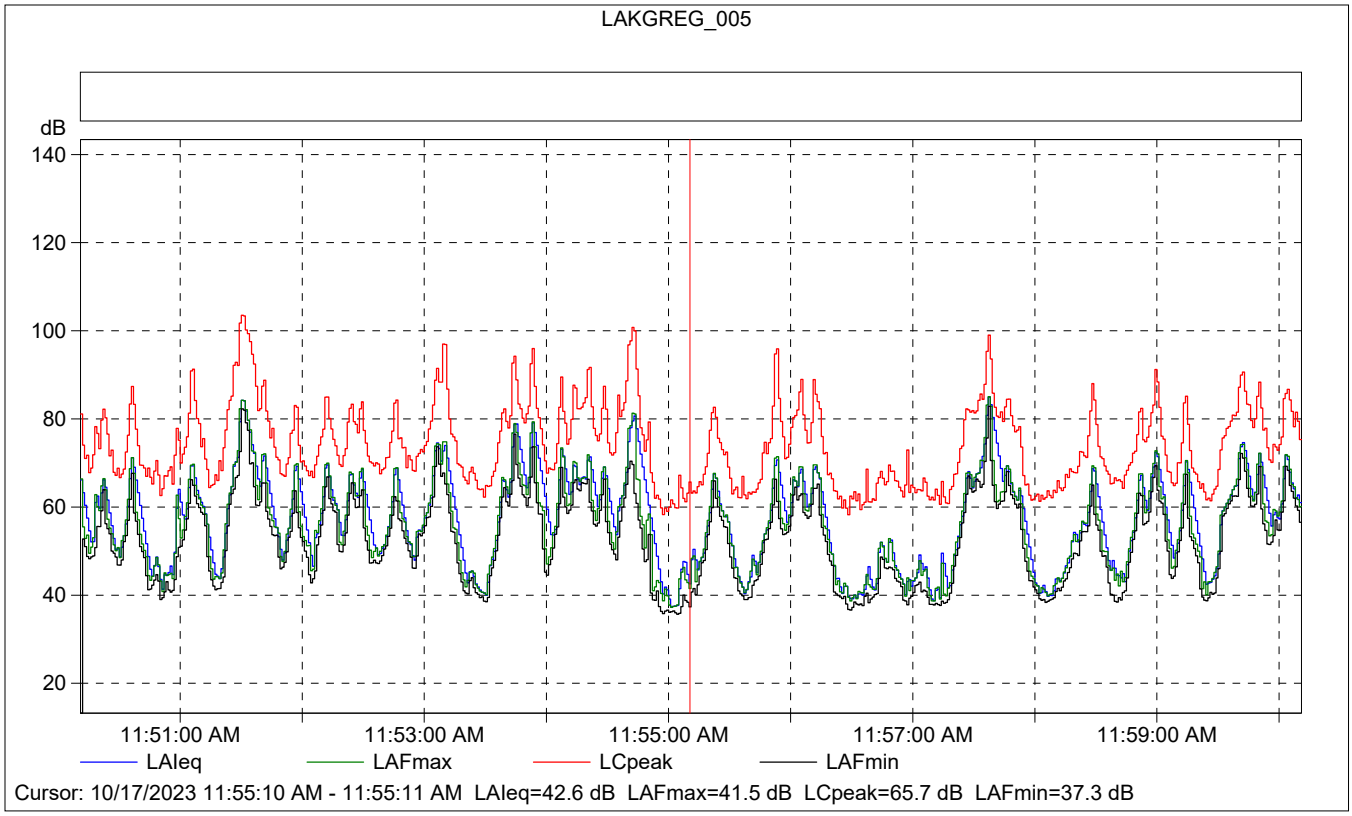

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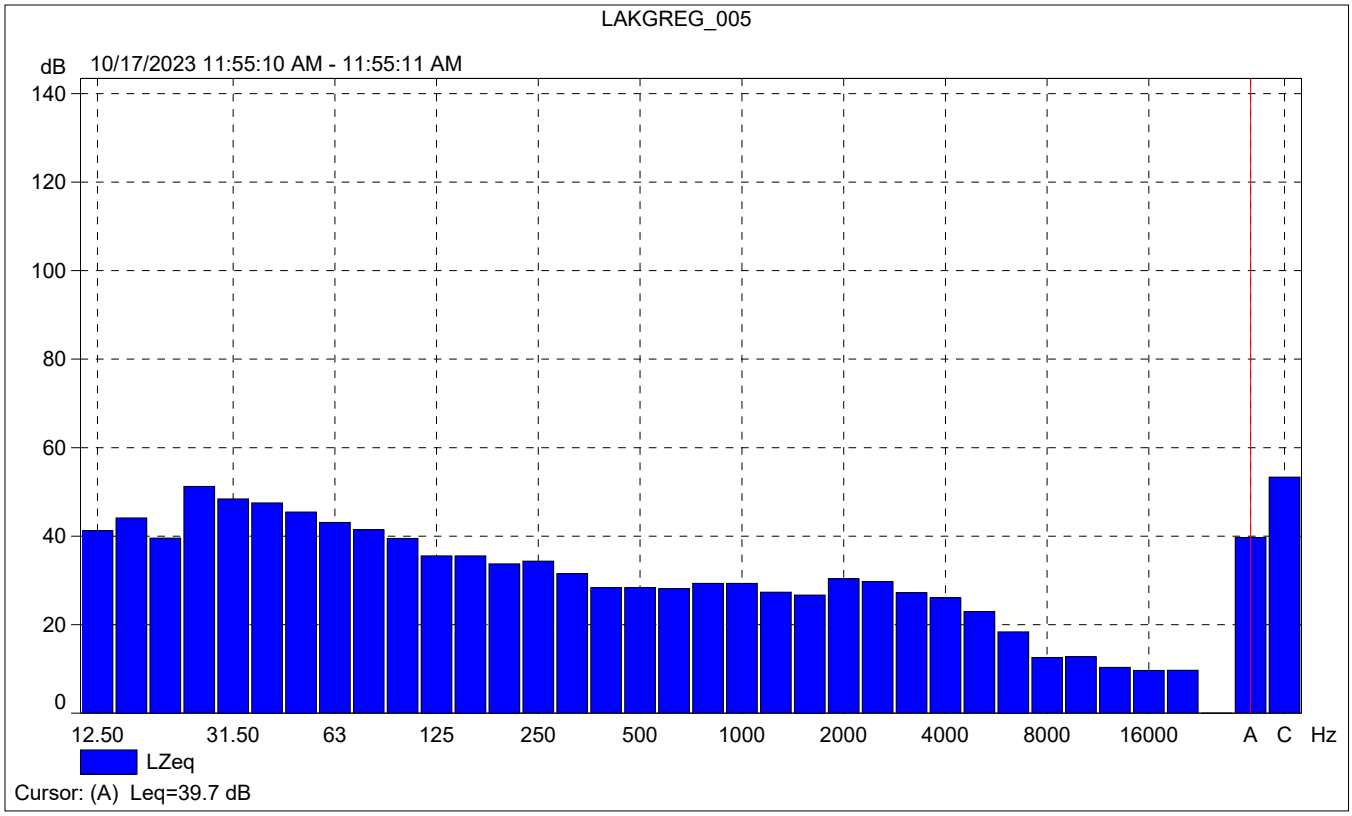
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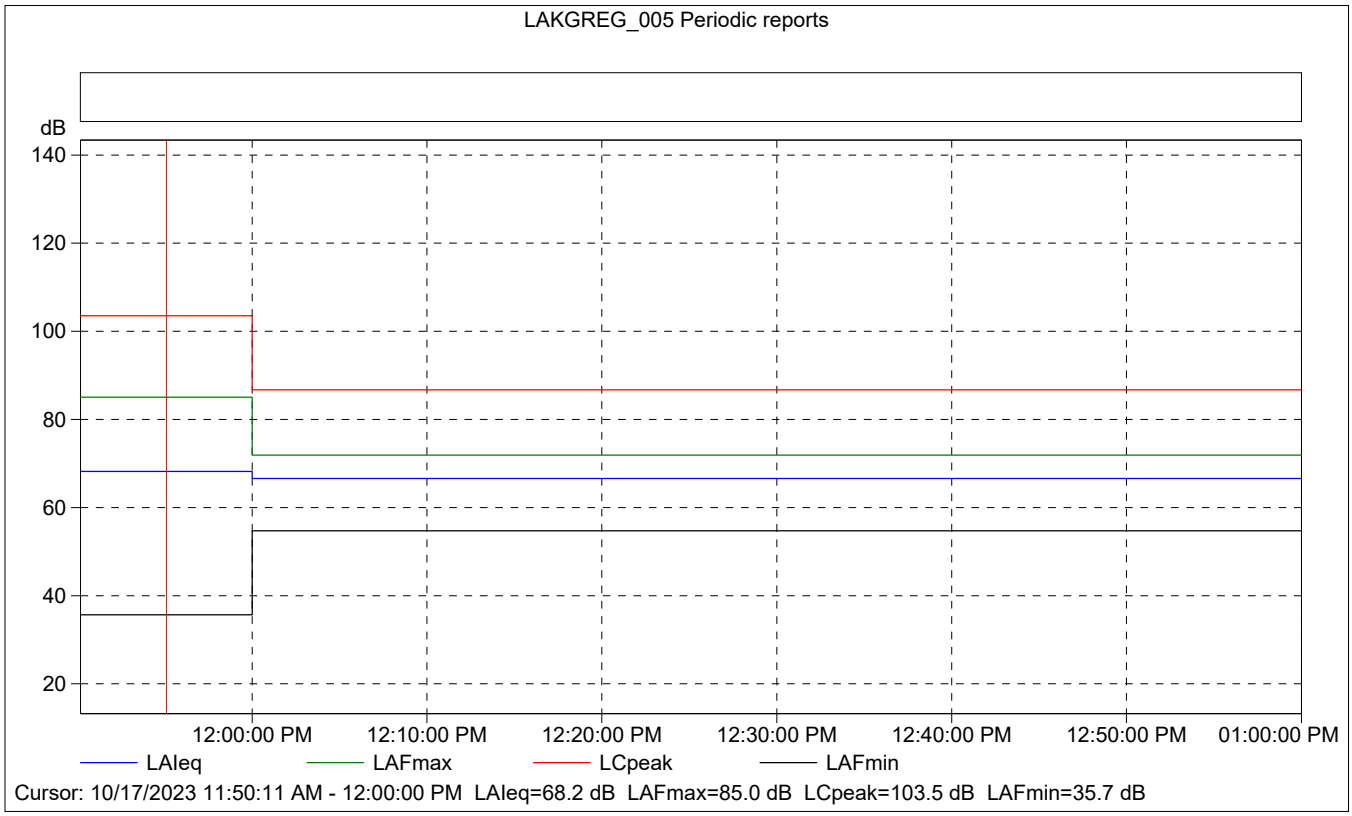
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LCpeak
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Cursor: 10/17/2023 11:50:11 AM - 12:00:00 PM LAIeq=68.2 dB LAFmax=85.0 dB LCpeak=103.5 dB LAFmin=35.7 dB

LAKGREG_005 Periodic reports

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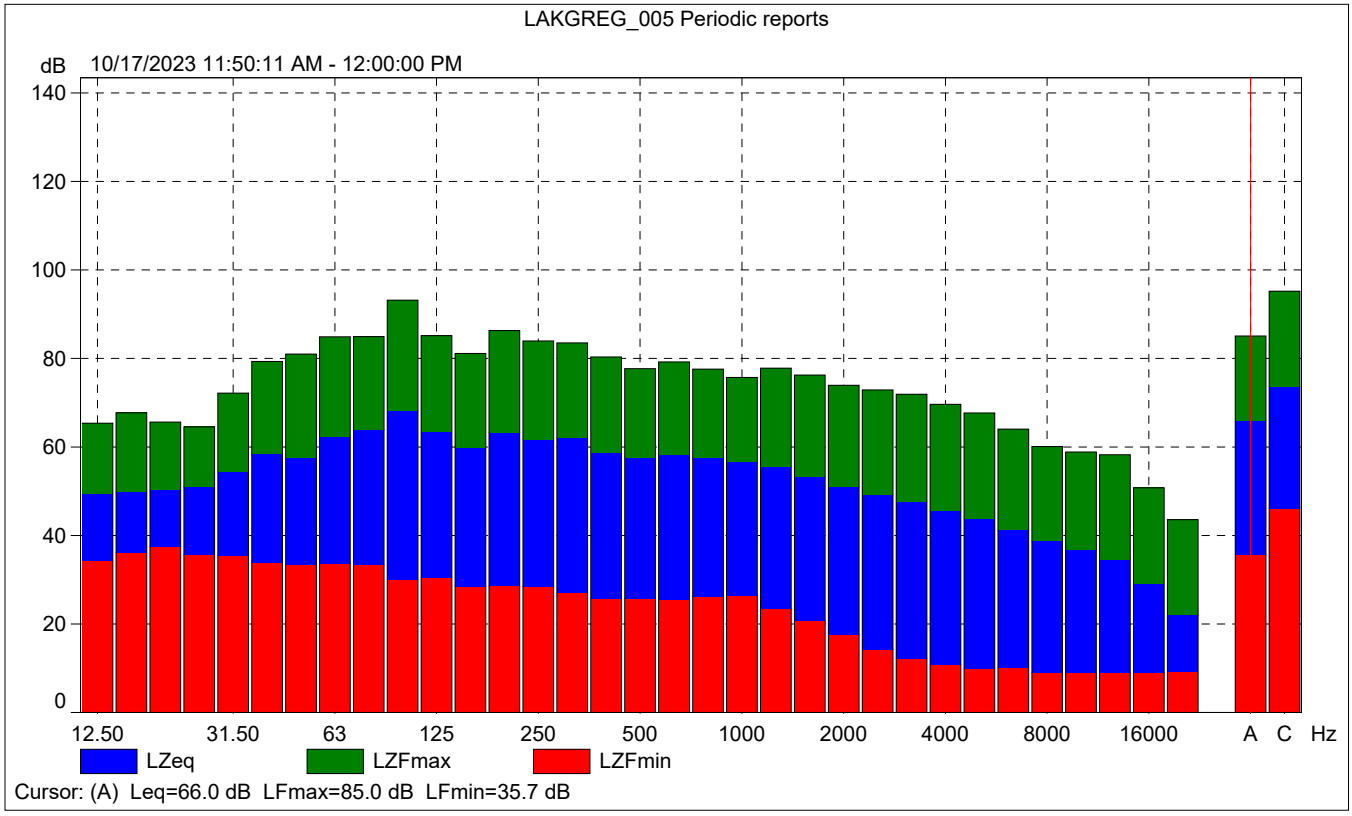

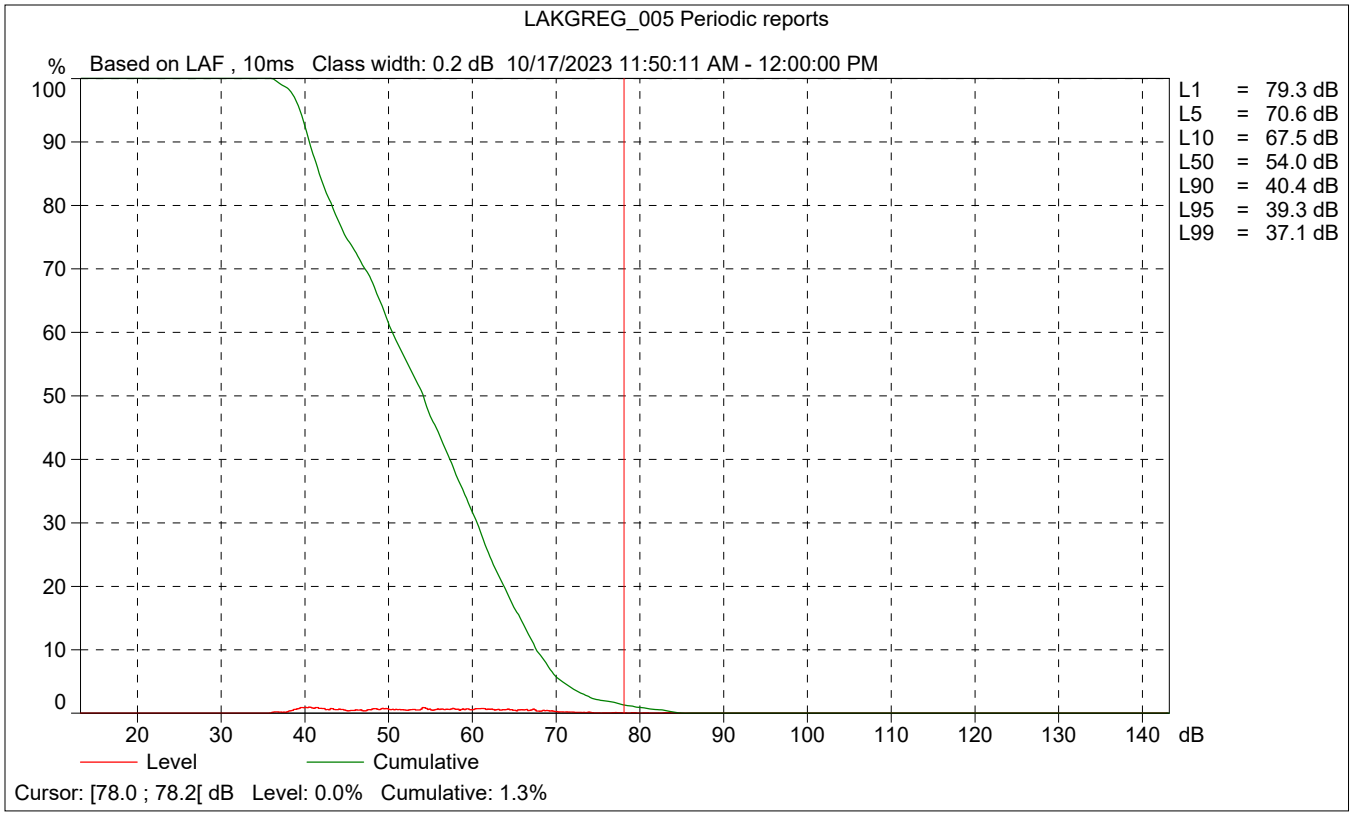
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dB
L1 = 79.3 dB
L5 = 70.6 dB
L10 = 67.5 dB
L50 = 54.0 dB
L90 = 40.4 dB
L95 = 39.3 dB
L99 = 37.1 dB
Level
Cumulative
Cursor: [78.0 ; 78.2[dB Level: 0.0% Cumulative: 1.3%

Appendix H – Geotechnical Investigations Report

Converse Consultants
Geotechnical Engineering
Environmental & Groundwater Science
Inspection & Testing Services

GEOTECHNICAL INVESTIGATION REPORT

LAKE GREGORY REGIONAL PARK SITEWIDE SEDIMENT MANAGEMENT
City of Crestline, San Bernardino County, California

CONVERSE PROJECT NO. 23-81-115-01

Prepared For:

J. SMITH AND T. MULI
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August 11, 2023

Converse Consultants
Geotechnical Engineering, Environmental & Groundwater Science, Inspection & Testing Services

August 11, 2023

Tim Muli, PE, CFM, QSD/P, LEED AP
Principal
J. Smith / T. Muli
33161 Camino Capistrano, Suite-D
San Juan Capistrano, CA 92675

Subject: **GEOTECHNICAL INVESTIGATION REPORT**
Lake Gregory Regional Park Sitewide Sediment Management
City of Crestline, County of San Bernardino, California
Converse Project No. 23-81-115-01

Dear Mr. Muli:

Converse Consultants (Converse) is pleased to submit our Geotechnical Investigation Report for the evaluation of the stockpile soils at the Lake Gregory Regional Park Sitewide Sediment Management Project, located in the City of Crestline, San Bernardino County, California. This report was prepared in accordance with our proposal dated January 23, 2023, and your Subconsultant Agreement for Professional Services dated June 9, 2023.

We appreciate the opportunity to be of service to J. Smith/T. Muli and the County of San Bernardino. Should you have any questions, please do not hesitate to contact us at 909-474-2847.

CONVERSE CONSULTANTS

Hashmi S. E. Quazi, PhD, GE, PE
Principal Engineer

Dist.: 1/Addressee (e-mail)
HSQ/SM/kvg

PROFESSIONAL CERTIFICATION

This report has been prepared by the individuals whose seals and signatures appear herein.

The findings, recommendations, specifications, or professional opinions contained in this report were prepared in accordance with generally accepted professional engineering, engineering geologic principles, and practice in this area of Southern California. There is no warranty, either expressed or implied.

REGISTERED PROFESSIONAL ENGINEER
HASHMI S. E. QUAZI
NO. GE 2517
Exp 06/2025
GEOTECHNICAL
STATE OF CALIFORNIA

Stephen McPherson
Staff Geologist

Hashmi S.E. Quazi, PhD, PE, GE
Principal Engineer

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APPENDIX

Appendix A ..... *Laboratory Testing Program*
Appendix B ..... *Slope Stability Analysis Results*

1.0 INTRODUCTION

This geotechnical investigation report was prepared by Converse for the Lake Gregory Regional Park Sitewide Sediment management project, located in the City of Crestline, San Bernardino County, California. The approximate location of the proposed project is shown in Figure No. 1, *Approximate Project Location Map.*

The purpose of this investigation was to evaluate dirt stockpiles and to provide geotechnical recommendations for design and construction of the project.

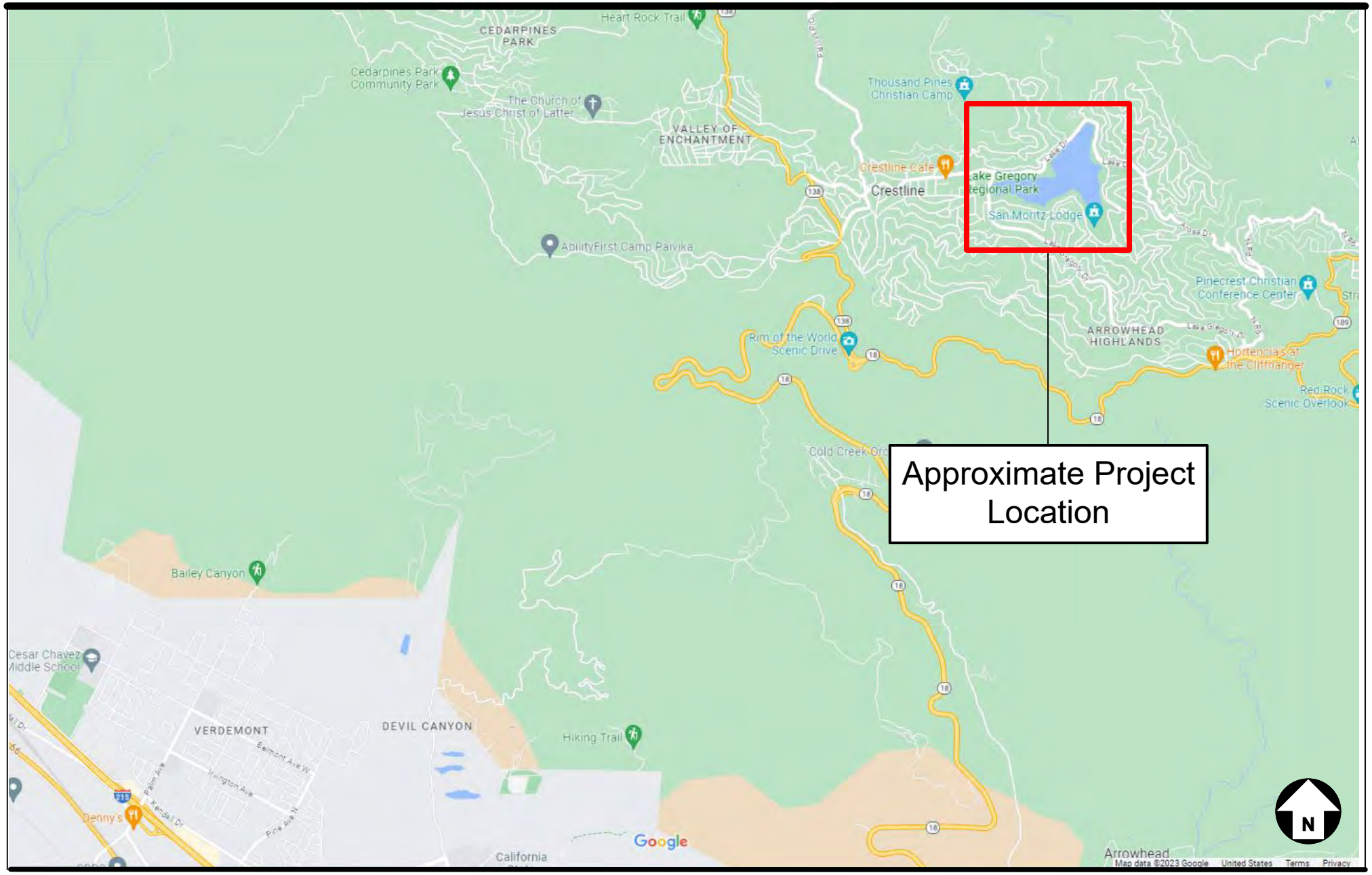
This report was prepared for the project described herein and is intended for use solely by J. Smith/T. Muli, and their authorized agents. This report may be made available to the prospective bidders for bidding purposes. This report may not contain sufficient information for use by others and/or other purposes.

2.0 PROJECT DESCRIPTION

It is our understanding that the project will include an embankment fill which will be constructed at a minimum slope ratio of 3H:1V (H = horizontal and V = Vertical). The embankment fill height will range from 5 feet to 20 feet; with the majority in the range between 10 feet and15 feet. The dirt stockpiles within the park will be used to build the embankment. The only other potential structures would be reinforced concrete pipe (RCP) storm drain, retaining walls, and rip-rap slope armoring.

3.0 SITE DESCRIPTION

Gregory Lake is an 84-acre reservoir located in the San Bernardino National Forest of the San Bernardino Mountains in the City of Crestline, San Bernardino County, California. On the western shore of the lake is a u-shaped swimming beach that is the focus of the proposed beach improvements (Photograph No. 1). The lake is bounded by Lake Drive to the north and northeast, San Moritz Drive to the southeast and south, and Lake Gregory Drive to the west. The Lake Gregory Dam is located in the northeast section of the lake with Camp Switzerland and stockpile to the north of the dam (Photograph No. 2). The library stockpile is located to the west of the swimming area. (Photograph No. 3).



Project: Lake Gregory Regional Park Sitewide Sediment Management
Location: City of Crestline, San Bernardino County, California

For: J. Smith and T. Muli

Approximate Project Location Map

Project No.
23-81-115-01

Converse Consultants

Figure No.
1

Photograph No. 1: Lake Gregory Swimming Area, facing east.

Photograph No. 2: Camp Switzerland with old stockpile in the foreground and the new stockpile in the back, facing east.

Photograph No. 3: Library with library stockpile in the foreground consisting of the steam bed, facing south.

4.0 SCOPE OF WORK

The scope of Converse's investigation is described in the following sections.

4.1 Project Set-up

The project set-up consisted of the following tasks.

- Review of plans and data relevant to the project.
- Conducted a site reconnaissance to view the area of the proposed improvements and collect representative bulk samples from the stockpiles.

4.2 Soil Sampling

Three bulk samples (SP-01 through SP-03) from Camp Switzerland old stockpile, two bulk samples (SP-04 and SP-05) from Camp Switzerland new stockpile and two bulk samples (SP-06 and SP-07) from Library stockpile were collected to perform laboratory testing. The approximate locations of the stockpiles are shown on Figure Nos. 2a through 2c, *Approximate Stockpile Locations Map*.

Project: Lake Gregory Regional Park Sitewide Sediment Management

Location: City of Crestline, San Bernardino County, California

For: J. Smith and T. Muli

Approximate Stockpile Locations Map

Project No.
23-81-115-01

Converse Consultants

Figure No.
2a

Project: Lake Gregory Regional Park Sitewide Sediment Management

Location: City of Crestline, San Bernardino County, California

For: J. Smith and T. Muli

Approximate Stockpile Locations Map

Project No.
23-81-115-01

Converse Consultants

Figure No.
2b

Project: Lake Gregory Regional Park Sitewide Sediment Management

Location: City of Crestline, San Bernardino County, California

For: J. Smith and T. Muli

Approximate Stockpile Locations Map

Project No.
23-81-115-01

Converse Consultants

Figure No.
2c

4.3 Laboratory Testing

Representative samples of the stockpiles were tested in the laboratory to aid in soil classification, and to evaluate relevant engineering properties. These tests included the following.

- *In-situ* moisture contents (ASTM D2216)
- Organic content (ASTM D2974, Methods A and C)
- Expansion index (ASTM D4829)
- Soils corrosivity (CTM 643, 422, 417, 532)
- Grain size analysis (ASTM D6913)
- Maximum dry density and optimum-moisture content (ASTM D1557)
- Remolded direct shear (ASTM D3080)

For a description of the laboratory test methods and test results, see Appendix A, *Laboratory Testing Program*.

4.4 Analysis and Report Preparation

Data obtained from the laboratory testing program was assembled and evaluated. Geotechnical analyses of the compiled data were performed, followed by the preparation of this report to present our findings, conclusions, and recommendations for the project.

5.0 STOCKPILE CONDITIONS

To describe stockpile conditions, a summary of the relevant laboratory test results of each stockpile is presented in Table No. 1, *Summary of Relevant Laboratory Test Results*.

5.1 Camp Switzerland Old Stockpile

Based on the laboratory test results, the stockpile' materials primarily consist of a mixture of sand, silt and gravel with organic material. The expansion indices of the stockpile' soils were 0, corresponding to very low expansion potential. Test results indicate soils are non-corrosive.

5.2 Camp Switzerland New Stockpile

Based on the laboratory test results, the stockpile' materials primarily consist of a mixture of sand, silt and gravel. The expansion index of the stockpile' soils was 0, corresponding to very low expansion potential.

Table No. 1, Summary of Relevant Laboratory Test Results

Stockpile	Sample	USCS Soil Classification	EI	Corrosivity				Max. Dry Density (pcf)	Optimum Moisture Content (%)	Friction Angle (Deg.)	Cohesion (psf)
				pH	Soluble Sulfates (ppm)	Soluble Chlorides (ppm)	Min. Resistivity (ohm-cm)				
Camp Switzerland (Old)	SP-01	Sand with Silt and Gravel (SP-SM)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	SP-02	Sand (SP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	SP-03	Silty Sand (SM)	0	7.7	16	17	20,081	N/A	N/A	N/A	N/A
Camp Switzerland (New)	SP-04	Silty Sand (SM)	0					118	11	34	50
	SP-05	Silty Sand with Gravel (SM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Library	SP-06	Sand with Gravel (SP)	N/A	7.6	19	18	26,795	N/A	N/A	N/A	N/A
	SP-07	Sand with Gravel (SP)	N/A	N/A	N/A	N/A	N/A	120	12	33	50

Note: EI = Expansion Index; Friction Angle and Cohesion values are based on remolded direct shear.

5.3 Library

Based on the laboratory test results, the stockpile' materials primarily consist of a mixture of sand and gravel. Test results indicate soils are non-corrosive.

6.0 FAULTING AND SEISMICITY

The location of the site with respect to active faults and associated seismicity is discussed below.

6.1 Faulting

The project site is situated in a seismically active region. As is the case for most areas of Southern California, ground-shaking resulting from earthquakes associated with nearby and more distant faults may occur at the project site. During the life of the project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site.

The project site is not located within a currently mapped State of California; however, it is located within a San Bernardino County Earthquake Fault Zone (SBC 2010b and CGS, 2007). Table No. 2, *Summary of Regional Faults,* summarizes selected data of known faults capable of seismic activity within 100 kilometers of the site. The data presented below was calculated using generalized site coordinates 34.2423 N, 117.2751 W, the National Seismic Hazard Maps Database (USGS, 2008) and other published geologic data.

Table No. 2, Summary of Regional Faults

Fault Name and Section	Closest Distance (km)	Slip Sense	Length (km)	Slip Rate (mm/year)	Maximum Magnitude
Cleghorn	3.65	strike slip	25	3.0	6.80
S. San Andreas	6.48	strike slip	548	n/a	8.18
North Frontal (West)	8.31	reverse	50	1.0	7.20
San Jacinto	11.94	strike slip	241	n/a	7.88
Cucamonga	16.87	thrust	28	5.0	6.70
Helendale-So Lockhart	37	strike slip	114	0.6	7.40
San Jose	40.89	strike slip	20	0.5	6.70
North Frontal (East)	44.92	thrust	27	0.5	7.00
Sierra Madre	44.93	reverse	57	2.0	7.20
Sierra Madre Connected	44.93	reverse	76	2.0	7.30
Chino, alt 2	49.26	strike slip	29	1.0	6.80
Chino, alt 1	49.32	strike slip	24	1.0	6.70
Clamshell-Sawpit	52.65	reverse	16	0.5	6.70

(Source: https://earthquake.usgs.gov/cfusion/hazfaults_2008_search/)

6.2 CBC Seismic Design Parameters

Seismic parameters based on the 2022 California Building Code (CBSC, 2019) and ASCE 7-22 are provided in the following table. These parameters were determined using the generalized coordinates (34.2423N, 117.2751W) and ASCE 7 Hazard online tool.

Table No. 3, CBC Seismic Design Parameters

Seismic Parameters	
Site Coordinates	34.2423 N, 117.2751 W
Site Class	D*
Risk Category	II
Mapped Short period (0.2-sec) Spectral Response Acceleration, S_s	2.56g
Mapped 1-second Spectral Response Acceleration, S_1	0.86g
MCE 0.2-sec period Spectral Response Acceleration, S_{MS}	2.21g
MCE 1-second period Spectral Response Acceleration, SM_1	2.33g
Design Spectral Response Acceleration for short period S_{DS}	1.48g
Design Spectral Response Acceleration for 1-second period, S_{D1}	1.55g
Site Modified Maximum Peak Ground Acceleration, PGA_M	0.770g

** Stiff Soil Classification*

6.3 Secondary Effects of Seismic Activity

In general, secondary effects of seismic activity include surface fault rupture, soil liquefaction, landslides, lateral spreading, tsunamis, seiches, and earthquake-induced flooding. The site-specific potential for each of these seismic hazards is discussed in the following sections.

Surface Fault Rupture: The project site is not located within a State of California designated earthquake fault zone; However, it is located within a San Bernardino County designated earthquake fault zone (CGS, 2007; SBC, 2021b). Based on the dense nature of the underlying bedrock the risk of Surface Fault Rupture is considered low.

Liquefaction: Liquefaction is defined as the phenomenon in which a cohesion-less soil mass suffers a substantial reduction in its shear strength due to the development of excess pore pressures. During earthquakes, excess pore pressures in saturated soil deposits may develop as a result of induced cyclic shear stresses, resulting in liquefaction.

Soil liquefaction generally occurs in submerged granular soils and non-plastic silts located within 50 feet of the ground surface during or after strong ground shaking. There are several general requirements for liquefaction to occur. They are as follows.

- Soils must be submerged.
- Soils must be loose to medium-dense.
- Soils must be relatively near the ground surface.
- Ground motion must be intense.
- Duration of shaking must be sufficient for the soils to lose shear resistance.

The project site is not located within an area designated as a liquefaction risk by the State of California and San Bernardino County (CGS, 2007; SBC, 2021b), therefore the risk for liquefaction is negligible.

Landslides: Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The proposed project is not located within a designated State of California or San Bernardino County landslide hazard zone (CGS, 2007; SBC, 2021b).

Lateral Spreading: Seismically induced lateral spreading involves primarily lateral movement of earth materials over deeper layers which have liquefied due to ground shaking. It differs from slope failure in that complete ground failure involving large movement does not occur due to the relatively smaller gradient of the initial ground surface. Lateral spreading is characterized by near-vertical cracks with predominantly horizontal movement of the soil mass involved. Due to the low risk of liquefaction the risk of lateral spreading is considered low.

Tsunamis: Tsunamis are large waves generated in large bodies of water by fault displacement or major ground movement. Based on the inland location of the project site, tsunamis do not pose a hazard.

Seiches: Seiches are large waves generated in enclosed bodies of water in response to ground shaking. The proposed project site is located near and within Lake Gregory, an enclosed body of water and is at risk of flooding due to on and off-site seiches.

Earthquake-Induced Flooding: Dams or other water-retaining structures may fail as a result of large earthquakes, resulting in flooding. The project site is not located within a State of California or San Bernardino County designated dam inundation area (DSOD, 2021 and SBC, 2021a). The risk of earthquake-induced flooding at the project site due to failure of offsite dams is considered low. However, the Camp Switzerland stockpiles are within a State of California or San Bernardino County designated dam inundation area (DSOD, 2021 and SBC, 2021a). The risk of earthquake-induced flooding at the project Camp Switzerland stockpiles due to failure of the Lake Gregory Dam, No. 1803-3; National Dam ID:CA00224 dams is considered High.

7.0 LABORATORY TEST RESULTS

Laboratory testing was performed to determine the physical and chemical characteristics and engineering properties of the stockpiles' soils. Current physical test results are included in Appendix A, *Laboratory Testing Program*. Discussions of the various test results are presented below.

7.1 Physical Testing

- In-Place Moisture – *In-place* moisture content of the stockpiles' soils were determined in accordance with ASTM Standard D2216. Moisture of the soils content ranged from 5 to 60 (saturated sample) percent.
- *Expansion Index (EI)* - Three representative bulk soil samples were tested to evaluate the expansion potential stockpiled soils in accordance with ASTM Standard D4829. The test results indicated expansion indices of 0, corresponding to very low expansion potential.
- Grain Size Analyses (PA) – Six representative samples were tested to determine the relative grain size distribution in accordance with the ASTM Standard D6913. The test results are graphically presented in Drawing Nos. B-1a and B-1b, *Grain Size Distribution Results* in Appendix A, *Laboratory Testing Program*.
- Maximum Dry Density and Optimum Moisture Content (CP) – Typical moisture-density relationship tests were conducted on one representative sample in accordance with ASTM D1557. The results are presented in Drawing No. B-2, *Moisture-Density Relationship Results* in Appendix A, *Laboratory Testing Program*. The laboratory maximum dry densities were 118.0 and 120 pounds per cubic feet (pcf) and the optimum moisture contents of 11.0 and 12 percent, respectively.
- Remolded Direct Shear (DS) – Two direct shear tests were performed in accordance with ASTM Standard D3080 on samples remolded to 90% of the laboratory maximum dry density. The results of the direct shear tests are presented in Drawing Nos. B-3 and B-4, Direct Shear Test Results in Appendix A, Laboratory Testing Program.

7.2 Chemical Testing - Corrosivity Evaluation

Two representative soil samples were tested to determine minimum electrical resistivity, pH, and chemical content, including soluble sulfate and chloride concentrations. The purpose of this test was to determine the corrosion potential of stockpiled soils when placed in contact with common construction materials. The test was performed by AP Engineering and Testing, Inc. (Pomona, CA) in accordance with California Test Methods 643, 422, and 417. The test results are presented in Appendix A, *Laboratory Testing Program and* are summarized below.

- The pH measurements of the samples tested were 7.6 and 7.7.
- The sulfate contents of the samples tested were 16 and 19 ppm (0.016 and 0.019 percent by weight).
- The chloride concentrations of the samples tested were 17 and 18 ppm.
- The minimum electrical resistivities when saturated were 20,081 and 26,795 ohm-cm.

8.0 EARTHWORK AND SITE GRADING RECOMMENDATIONS

Recommendations for earthwork are presented in the following subsections.

8.1 General

This section contains our general recommendations regarding earthwork for the Lake Gregory Regional Park Sitewide Sediment Management project.

These recommendations are based on the results of our site visit and laboratory testing as well as our experience with similar projects, and data evaluation as presented in the preceding sections. These recommendations may require modification by the geotechnical consultant based on observation of the actual field conditions during remedial grading.

Prior to the start of construction, all underground existing utilities and appurtenances should be located at the project site. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications. All excavations should be conducted in such a manner as not to cause loss of bearing and/or lateral support of existing structures or utilities.

All existing structures (if any), debris, deleterious material and surficial soils containing roots and perishable materials should be stripped and removed from the project site. Deleterious material, including organics, organic disturbed soils, concrete, and debris generated during excavation, should not be placed as fill.

The final bottom surfaces of all excavations should be observed and approved by the project geotechnical consultant prior to placing any fill. Based on these observations, localized areas may require remedial grading deeper than indicated herein. Therefore, some variations in the depth and lateral extent of excavation recommended in this report should be anticipated.

8.2 Overexcavation

The overexcavation for different improvements' areas are presented below.

Table No. 4, Overexcavation Depths

Location	Condition	Minimum Excavation Depth
12:1 Slope Areas	Cut Area	6 inches
	Fill Area	12 inches
Berm Areas (3:1 Slope Areas)	Fill Area	12 inches
Walls	Footings	18 inches below footing bottom

The final bottom surfaces of all excavations should be observed and approved by the project geotechnical consultant prior to placing any fill. However, localized, deeper over-excavation could be encountered, by the geotechnical consultant during grading of the final bottom surfaces of all excavations.

If isolated pockets of very soft, loose, eroded, or pumping soil are encountered, the unstable soil should be excavated as needed to expose undisturbed, firm, and unyielding soils.

The contractor should determine the best manner to conduct the excavations, such that there are no losses of bearing and/or lateral support to the existing structures or utilities (if any).

Areas to receive fill and/or other surface improvements should be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition, and recompacted to at least 90 percent relative compaction (based on ASTM Test Method D1557).

8.3 Engineered Fill

No fill should be placed until excavations and/or natural ground preparation has been observed by the geotechnical consultant. Stockpiled and excavated soils should be processed, including removal of roots and debris, removal of oversized particles, mixing, and moisture conditioning, before placing as compacted fill. On-site soils used as fill should meet the following criteria.

- No particles larger than 8 inches in largest dimension.
- Rocks larger than 4 inches should not be placed within the upper 12 inches of subgrade soils.
- Free of all organic matter, debris, or other deleterious material.
- Expansion index of 20 or less.
- Contain less than 30 percent by weight retained in 3/4-inch sieve.
- Contain less than 40 percent fines (passing #200 sieve).

Based on laboratory testing results, on-site soils may be suitable as fill materials, considering subsection 8.4, *Organic Content*.

Imported materials, if required, should meet the above criteria prior to being used as compacted fill. Any imported fills should be tested and approved by a geotechnical representative prior to delivery to the site.

8.4 Organic Content

Based on the laboratory test results, organic content of the stockpiled soils is 11.5 percent. Fill materials should contain no more than 4 percent overall organic. Therefore, these soils consisting of organic content should be blended with natural soils/clean imported soils (free of organic content) or removed from the site prior to use as fill materials.

The partially organic soils can be blended with the on-site natural soils at a ratio of 4 to 1 (natural soils/clean imported soils to partially organic soils) and placed as compacted fill, provided they are completely mixed during fill placement. The type of equipment and method of placement; blending and mixing of the partially organic materials with onsite natural soils or clean imported soils to be utilized by the grading contractor, should be reviewed and accepted by the geotechnical consultant prior to implementation. The testing frequency for verifying the percent organic content should be established by the geotechnical consultant prior to fill placement once the method of blending, placement, and mixing of the partially organic materials with onsite natural soils or clean imported soils.

8.5 Compacted Fill Placement

All surfaces to receive structural fills should be scarified to a depth of 12 inches. The soil should be moisture conditioned to within ±3 percent of optimum moisture content for coarse soils and 0 to 2 percent above optimum moisture content for fine soils. The scarified soils should be recompacted to at least 90 percent of the laboratory maximum dry density.

Fill soils should be thoroughly mixed, and moisture conditioned to within ±3 percent of optimum moisture content for coarse soils and 0 to 2 percent above optimum moisture content for fine soils. Fill soils should be evenly spread in horizontal lifts not exceeding 8 inches in uncompacted thickness.

All fill placed at the site should be compacted to at least 90 percent of the laboratory maximum dry density as determined by ASTM Standard D1557 test method unless a higher compaction is specified herein.

Fill materials should not be placed, spread or compacted during unfavorable weather conditions. When site grading is interrupted by heavy rain, filling operations should not resume until the geotechnical consultant approves the moisture and density conditions of the previously placed fill.

8.6 Backfill Recommendations Behind Walls

Compaction of backfill adjacent to retaining walls, which may be proposed, can produce excessive lateral pressures. Improper types and locations of compaction equipment and/or compaction techniques may damage the walls. The use of heavy compaction equipment should not be permitted within a horizontal distance of 5 feet from the wall. Backfill behind any structural walls within the recommended 5-foot zone should be compacted using lightweight construction equipment such as handheld compactors to avoid overstressing the walls.

9.0 DESIGN RECOMMENDATIONS

Design recommendations for this project is presented below:

9.1 Soil Design Parameters

Soil design parameters are presented below.

Table No. 5, Design Parameters

Parameter	Value
Allowable bearing capacity	1500 psf
Active Earth Pressure	35 psf
Passive Resistance	250 psf

Retaining walls may be supported on continuous footings. The minimum continuous footings' width and depth of embedment should be 15 and 18 inches, respectively.

The net allowable bearing value indicated above is obtained by applying a factor of safety of 3.0 to the net ultimate bearing capacity. If normal code requirements are applied for design, the above vertical bearing value may be increased by 33 percent for short duration loadings, which will include loadings induced by wind or seismic forces.

Active earth pressure assumes level backfill, no surcharge and no hydrostatic pressure. If water pressure is allowed to build up behind the structure, the active pressures should be reduced by 50 percent and added to a full hydrostatic pressure to compute the design pressures against the structure.

A factor of safety of 1.5 was applied in calculating passive earth pressure. The maximum value of the passive earth pressure should be limited to 1,500 psf for compacted fill.

9.2 Fill Slope Stability

The proposed 3:1 (H:V) berm slope will be constructed with on-site recycled Camp Switzerland fill material which is comprised of sand, silt and gravel.

The anticipated global stability of the proposed slope (embankment and cut slopes) under static and pseudo-static conditions were evaluated using the Slide 9.023 software (RocScience, 2022). Pseudostatic analyses were performed using a seismic coeffiecient of 0.2g.

For all slope conditions, a Mohr-Coulomb soil strength model was assumed, and Factors of Safety (FOS) for slope stability were evaluated using different methods such as Bishop Simplified and Spencer.

The relevant soil parameters for the proposed slope including unit weight, friction angle, cohesion was derived from field and laboratory test data, are presented in Table No. 6, *Soil Parameters Used for Slope Stability Analyses.*

Table No. 6, Soil Parameters Used for Slope Stability Analyses

Slope	Conditions	Unit Weight (pcf)	Internal Friction Angle (Degree)	Cohesion (psf)
Embankment	Dry (Static and Pseudo-Static)	116	33	0
	Fully Submerged (Static)	116	33	0
	Fully Submerged (Pseudo-Static)	116	34	50
Note: For fully submerged pseudo-static conditions, peak remolded direct shear test results were used. From a geotechnical perspective this is acceptable.				

The results of the analyses are presented in Table No. 7, *Factor of Safety Against Slope Failure* and in Appendix B, *Slope Stability Analysis Results*.

Table No. 7, Factors of Safety Against Slope Failure

Slope	Condition	Slope Ratio	Max. Slope Height (feet)	Static FOS	Required Min. FOS	Remarks
Embankment	Dry-Static	3H:1V	20	2.070	1.3	Stable
	Dry-PseudoStatic			1.215	1.1	Stable
	Fully Submerged-Static			2.070	1.5	Stable
	Fully Submerged-PseudoStatic			1.104	1.1	Stable
Note: H = Horizontal, V = Vertical						

9.3 Retaining Walls Drainage

The recommended lateral earth pressure values do not include lateral pressures due to hydrostatic forces. Therefore, wall backfill should be free draining and provisions should be made to collect and dispose of excess water that may accumulate behind earth retaining structures. Behind wall drainage may be provided by free-draining gravel surrounded by synthetic filter fabric or by prefabricated, synthetic drain panels or weep holes. In either case, drainage should be collected by perforated pipes and directed to a sump, storm drain, or other suitable location for disposal. We recommend drain rock should consist of durable stone having 100 percent passing the 1-inch sieve and less than 5 percent passing the No. 4 sieve. Synthetic filter fabric should have an equivalent opening size (EOS), U.S. Standard Sieve, of between 40 and 70, a minimum flow rate of 110 gallons per minute per square foot of fabric, and a minimum puncture strength of 110 pounds.

10.0 CONSTRUCTION RECOMMENDATIONS

Temporary sloped excavation recommendations are presented in the following sections.

10.1 General

Prior to the start of construction, all existing underground utilities (if any) should be located at the project site. Such utilities should either be protected in-place or removed and replaced during construction as required by the project specifications.

Excavations near existing structures may require vertical side wall excavation. Where the side of the excavation is a vertical cut, it should be adequately supported by temporary shoring to protect workers and any adjacent structures.

All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act, and the Construction Safety Act should be met. The soils exposed in cuts should be observed during excavation by the geotechnical consultant and the competent person designated by the contractor. If potentially unstable soil conditions are encountered, modifications of slope ratios for temporary cuts may be required.

10.2 Permanent Fill Slopes

Berm fill slopes should be constructed with slope ratios no steeper than 3:1 (H:V). Fill slopes should be constructed on compacted fill prepared in accordance with Section 8.5, *Compacted Fill Placement*.

Fill slopes should be properly compacted out to the slope face. This may be achieved by either overbuilding then cutting back to the compacted core, frequent backrolling, or

by utilizing other methods that meet the intent of the project specifications. The fill slope face should be track rolled to achieve compaction.

11.0 GEOTECHNICAL SERVICES DURING CONSTRUCTION

The project geotechnical consultant should review plans and specifications as the project design progresses. Such review is necessary to identify design elements, assumptions, or new conditions which require revisions or additions to our geotechnical recommendations.

The project geotechnical consultant should be present to observe conditions during construction. Geotechnical observation and testing should be performed as needed to verify compliance with project specifications. Additional geotechnical recommendations may be required based on subsurface conditions encountered during construction.

12.0 CLOSURE

This report is prepared for the project described herein and is intended for use solely by J. Smith and T. Muli and their authorized agents, to assist in the development of the proposed project. Our findings and recommendations were obtained in accordance with generally accepted professional principles practiced in geotechnical engineering. We make no other warranty, either expressed or implied.

Converse Consultants is not responsible or liable for any claims or damages associated with interpretation of available information provided to others. Data derived through sampling and laboratory testing is extrapolated by Converse employees who render an opinion about the overall soil conditions. Actual conditions in areas not sampled may differ. In the event that changes to the project occur, or additional, relevant information about the project is brought to our attention, the recommendations contained in this report may not be valid unless these changes and additional relevant information are reviewed, and the recommendations of this report are modified or verified in writing. In addition, the recommendations can only be finalized by observing actual subsurface conditions revealed during construction. Converse cannot be held responsible for misinterpretation or changes to our recommendations made by others during construction.

As the project evolves, continued consultation and construction monitoring by a qualified geotechnical consultant should be considered an extension of geotechnical investigation services performed to date. The geotechnical consultant should review plans and specifications to verify that the recommendations presented herein have been appropriately interpreted, and that the design assumptions used in this report are valid. Where significant design changes occur, Converse may be required to augment or modify the recommendations presented herein. Subsurface conditions may require additional analyses and, possibly, modified recommendations.

Design recommendations given in this report are based on the assumption that the recommendations contained in this report are implemented. Additional consultation may be prudent to interpret Converse's findings for contractors, or to possibly refine these recommendations based upon the review of the actual site conditions encountered during construction. If the scope of the project changes, if project completion is to be delayed, or if the report is to be used for another purpose, this office should be consulted.

13.0 REFERENCES

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE), 2022, Minimum Design Loads and Associated Criteria for Buildings and Other Structures, SEI/ASCE Standard No. 7-22.

CALIFORNIA BUILDING STANDARDS COMMISSION (CBSC), 2022, California Building Code (CBC).

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SAN BERNARDINO COUNTY, 2010b, San Bernardino County General Plan Geologic Hazard Overlays, Map Sheet FH22C, scale 1:14,400, dated March 9, 2010.

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Appendix A

Laboratory Testing Program

APPENDIX A

LABORATORY TESTING PROGRAM

Tests were conducted in our laboratory on representative soil samples for the purpose of classification and evaluation of their physical properties and engineering characteristics. The amount and selection of tests were based on the geotechnical parameters required for this project. Test results are presented herein. The following is a summary of the various laboratory tests conducted for this project.

In-Place Moisture Content

The stockpiles' soils were tested to evaluate the *In-place* moisture content in accordance with ASTM Standard D2216. The test result is presented in the following table.

Table No. A-1, In-place Moisture Content Results

Sample No.	Depth (ft)	Soil Classification	Moisture Content (%)
SP-01	0.0-2.0	Sand with Silt and Gravel (SP-SM)	10.0
SP-02	0.0-2.0	Sand (SP)	5.0
SP-03	0.0-2.0	Silty Sand (SM)	19.0
SP-04	0.0-2.0	Silty Sand (SM)	9.0
SP-05	0.0-2.0	Silty Sand with Gravel (SM)	14.0
SP-06	0.0-2.0	Sand with Gravel (SP)	*60.0
SP-07	0.0-2.0	Sand with Gravel (SP)	6.0

**Please note SP-06 has a high moisture content due to saturated sample.*

Organic Content

Test was performed on one select sample in accordance with the ASTM Standard D2974 test, Methods A and C. Test result is summarized in the table below.

Table No. A-2, Summary of Organic Content Test Result

Sample No.	Depth (feet)	Soil Description	Total Organic Content (%)
SP-03	0.0-1.3	Silty Sand (SM)	11.5

Expansion Index (EI)

Three representative bulk samples were tested to evaluate the expansion potential of materials collected from the stockpiled soils in accordance with ASTM D4829 Standard. The test result is presented in the following table.

Table No. A-3, Expansion Index Test Results

Sample No.	Depth feet)	Soil Description	Expansion Index	Expansion Potential
SP-01	0.0-2.0	Sand with Silt and Gravel (SP-SM)	0	Very Low
SP-03	0.0-2.0	Silty Sand (SM)	0	Very Low
SP-04	0.0-2.0	Silty Sand (SM)	0	Very Low

Soil Corrosivity (CR)

Two representative soil samples were tested to determine minimum electrical resistivity, pH, and chemical content, including soluble sulfate and chloride concentrations. The purpose of this test was to determine the corrosion potential of stockpiled soils when placed in contact with common construction materials. The test was performed by AP Engineering and Testing, Inc. (Pomona, CA) in accordance with Caltrans Test Methods 643, 422 and 417. Test results are presented in the following table.

Table No. A-4, Soil Corrosivity Test Results

Sample No.	Depth (feet)	pH	Soluble Sulfates (CA 417) (ppm)	Soluble Chlorides (CA 422) (ppm)	Min. Resistivity (CA 643) (Ohm-cm)
SP-03	0.0-2.0	7.7	16	17	20,081
SP-06	0.0-2.0	7.6	19	18	26,795

Grain-Size Analyses (PA)

To assist in classification of soils, mechanical grain-size analyses were performed on six select samples in accordance with the ASTM Standard D6913 test method. Grain-size curves are shown in Drawing No. A-1, *Grain Size Distribution Results* and results are presented in the below table.

Table No. A-5, Grain Size Distribution Test Results

Sample No.	Depth (ft)	Soil Classification	% Gravel	% Sand	%Silt	%Clay
SP-01	0.0-2.0	Sand with Silt and Gravel (SP-SM)	18.0	72.9	9.1	
SP-02	0.0-2.0	Sand (SP)	14.0	82.0	4.0	
SP-04	0.0-2.0	Silty Sand (SM)	11.0	68.9	20.1	
SP-05	0.0-2.0	Silty Sand with Gravel (SM)	19.0	62.7	18.3	
SP-06	0.0-2.0	Sand with Gravel (SP)	19.0	62.7	18.3	
SP-07	0.0-2.0	Sand with Gravel (SP)	18.0	81.1	0.9	

Maximum Dry Density and Optimum Moisture Content (CP)

Two laboratory maximum dry density-optimum moisture content relationship tests were performed on two representative bulk samples. The tests were conducted in accordance with the ASTM Standard D1557 test method. The test results are presented in Drawing No. A-2, *Moisture-Density Relationship Results,* and are summarized in the following table.

Table No A-6, Summary of Moisture-Density Relationship Results

Sample No.	Depth (feet)	Soil Description	Optimum Moisture (%)	Maximum Density (lb./cft)
SP-04	0.0-2.0	Silty Sand (SM), Dark Brown	11.0	118.0
SP-07	0.0-2.0	Sand with Gravel (SP), Brown	12.0	120.0

Direct Shear (DS)

Two direct shear tests were performed on soil samples (remolded to 90 percent of the maximum dry density and optimum moisture content) under soaked moisture conditions, in accordance with the ASTM D3080 method. For each test, three samples contained in a brass sampler ring were placed, one at a time, directly into the test apparatus and subjected to a range of normal loads appropriate for the anticipated conditions. The samples were then sheared at a constant strain rate of 0.02 inch/minute. Shear deformation was recorded until a maximum of about 0.25-inch shear displacement was achieved. Ultimate strength was selected from the shear-stress deformation data and plotted to determine the shear strength parameters. For test results, see Drawing Nos. A-3 and A-4*, Direct Shear Test Results,* and in the following table.

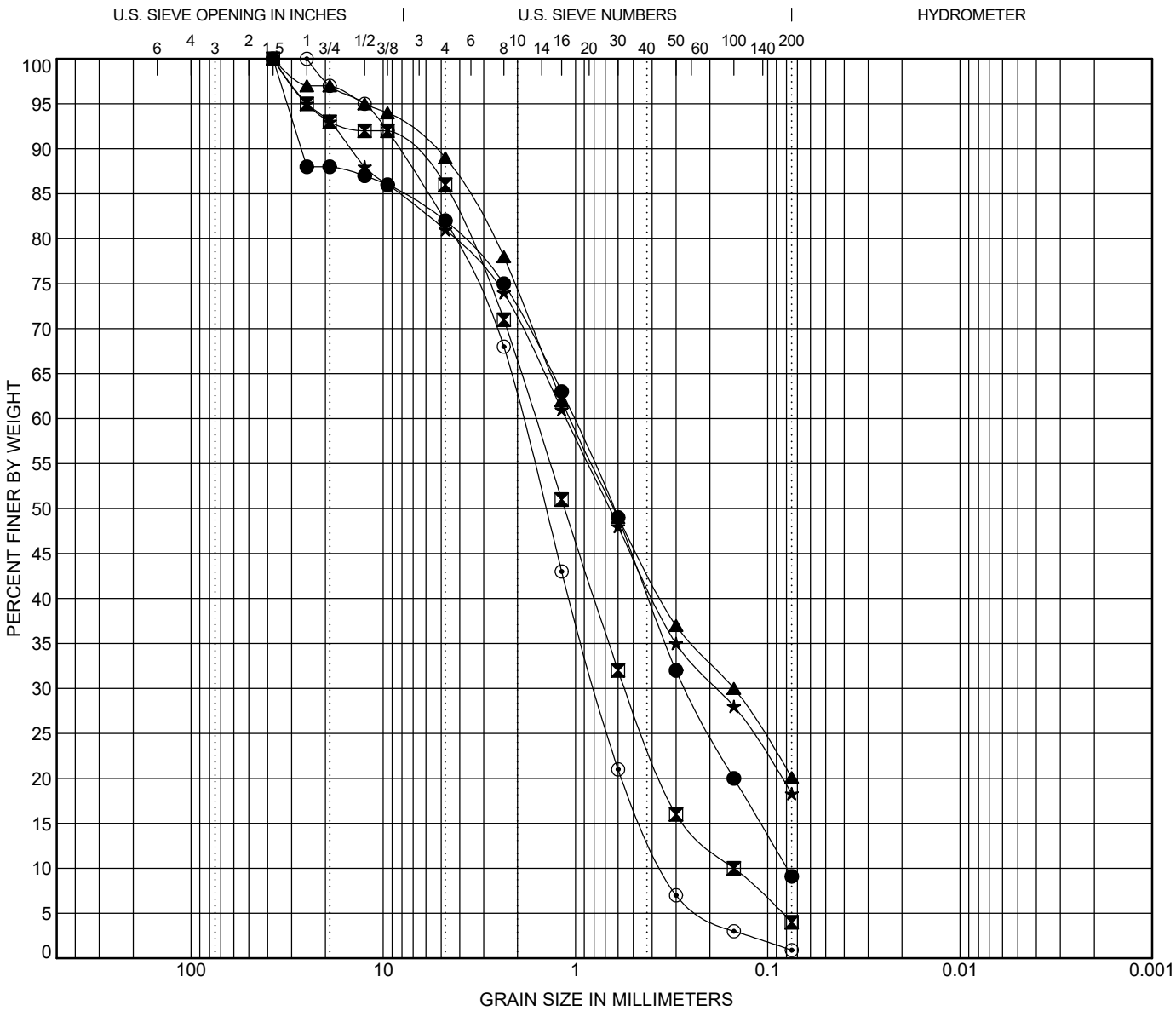
Table No. A-7, Direct Shear Test Results

Sample No.	Depth (feet)	Soil Description	Ultimate Strength Parameters	
			Friction Angle (degrees)	Cohesion (psf)
*SP-04	0.0-2.0	Silty Sand (SM)	34	50
*SP-07	0.0-2.0	Sand with Gravel (SP)	33	50

(*Remolded to 90% of laboratory maximum dry density.)

Sample Storage

Soil samples currently stored in our laboratory will be discarded thirty days after the date of the final report, unless this office receives a specific request to retain the samples for a longer period.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Boring No.	Depth (ft)	Description	LL	PL	PI	Cc	Cu
●	**SP-01**	**0-2**	**SAND WITH SILT AND GRAVEL (SP-SM)**				**0.88**	**12.85**
⊠	**SP-02**	**0-2**	**SAND (SP)**				**1.25**	**10.75**
▲	**SP-04**	**0-2**	**SILTY SAND (SM)**					
★	**SP-05**	**0-2**	**SILTY SAND WITH GRAVEL (SM)**					
⊙	**SP-06**	**0-2**	**SAND WITH GRAVEL (SP)**				**0.95**	**5.43**

	Boring No.	Depth (ft)	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**SP-01**	**0-2**	**37.5**	**1.021**	**0.267**	**0.079**	**18.0**	**72.9**	**9.1**	
⊠	**SP-02**	**0-2**	**37.5**	**1.612**	**0.55**	**0.15**	**14.0**	**82.0**	**4.0**	
▲	**SP-04**	**0-2**	**37.5**	**1.063**	**0.15**		**11.0**	**68.9**	**20.1**	
★	**SP-05**	**0-2**	**37.5**	**1.12**	**0.183**		**19.0**	**62.7**	**18.3**	
⊙	**SP-06**	**0-2**	**25**	**1.891**	**0.791**	**0.348**	**18.0**	**81.1**	**0.9**	

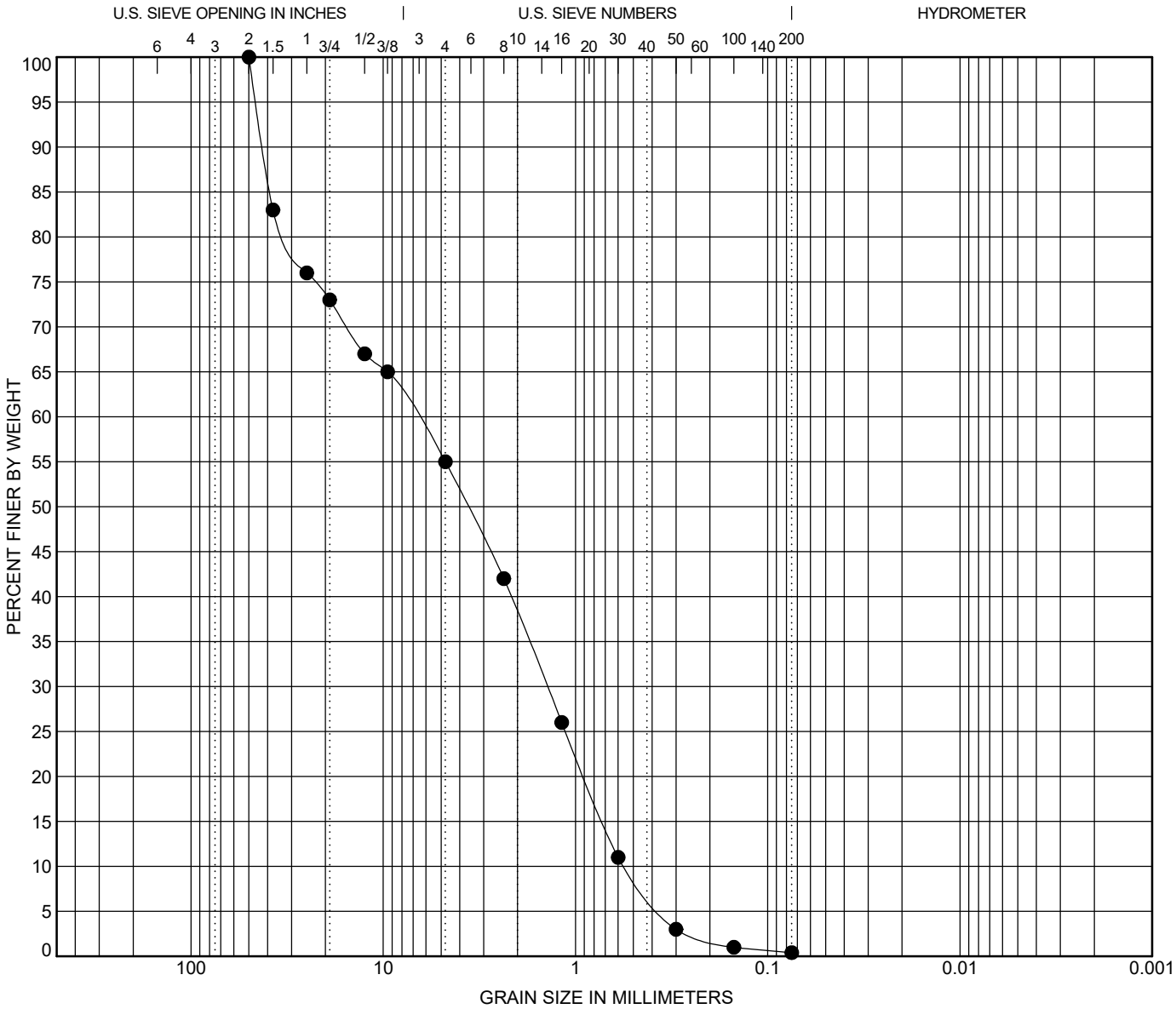
GRAIN SIZE DISTRIBUTION RESULTS

Converse Consultants

Lake Gregory Regional Park Sitewide Sediment Management
City of Crestline, San Bernadino County, California
For: J. Smith and T. Muli

Project No. **23-81-115-01**

Drawing No. **A-1a**



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Boring No.	Depth (ft)	Description	LL	PL	PI	Cc	Cu
●	**SP-07**	**0-2**	**SAND WITH GRAVEL (SP)**				**0.53**	**12.21**

	Boring No.	Depth (ft)	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**SP-07**	**0-2**	**50**	**6.718**	**1.403**	**0.55**	**45.0**	**54.6**	**0.4**	

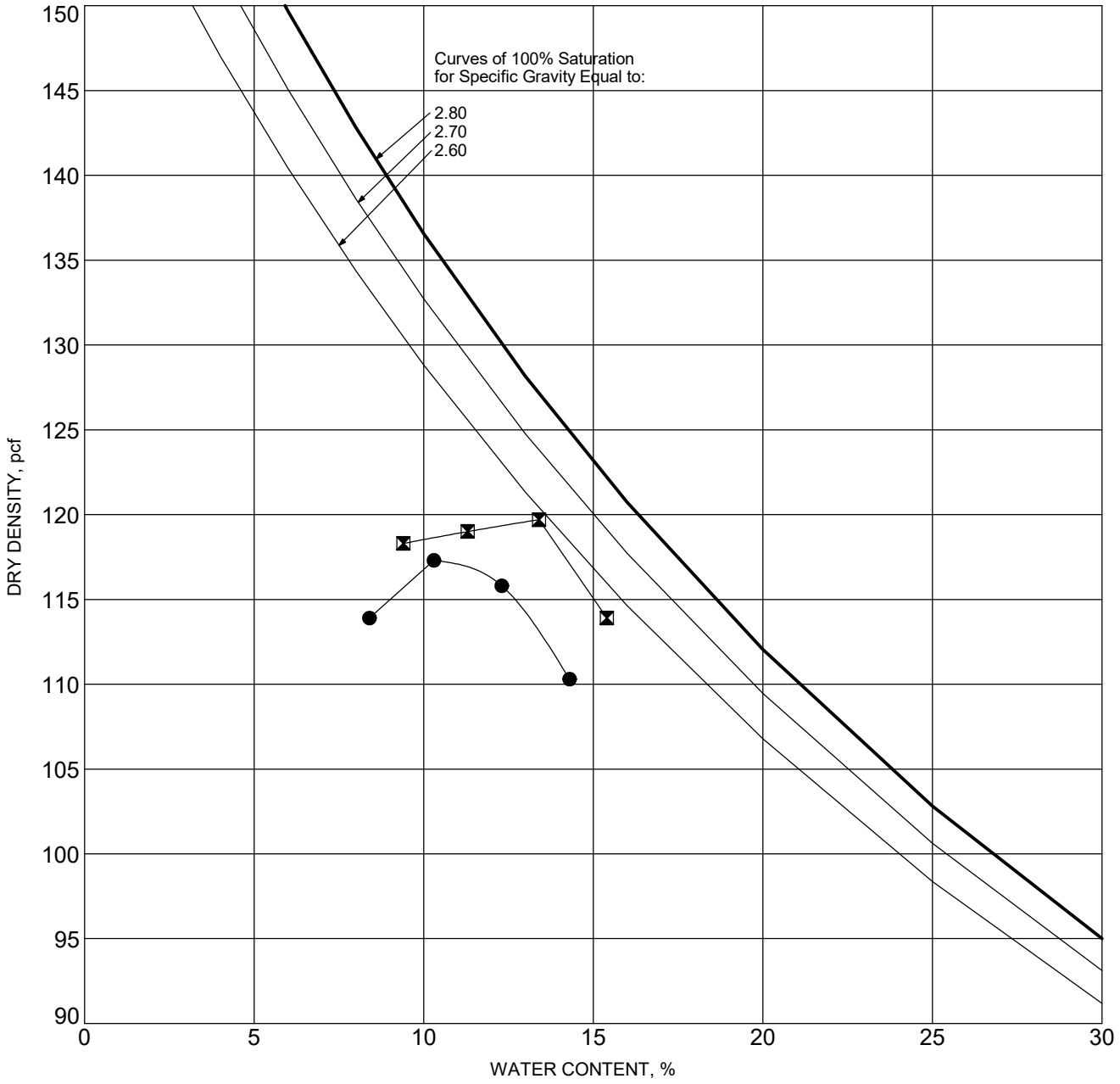
GRAIN SIZE DISTRIBUTION RESULTS

Converse Consultants

Lake Gregory Regional Park Sitewide Sediment Management
City of Crestline, San Bernadino County, California
For: J. Smith and T. Muli

Project No. **23-81-115-01**

Drawing No. **A-1b**



SYMBOL	BORING NO.	DEPTH (ft)	DESCRIPTION	ASTM TEST METHOD	OPTIMUM WATER, %	MAXIMUM DRY DENSITY, pcf
●	**SP-04**	**0-2**	**SIILTY SAND (SM), DARK BROWN**	**D1557 A**	**11**	**118**
⊠	**SP-07**	**0-2**	**SAND WITH GRAVEL (SP), BROWN**	**D1557 B**	**12**	**120**

MOISTURE-DENSITY RELATIONSHIP RESULTS

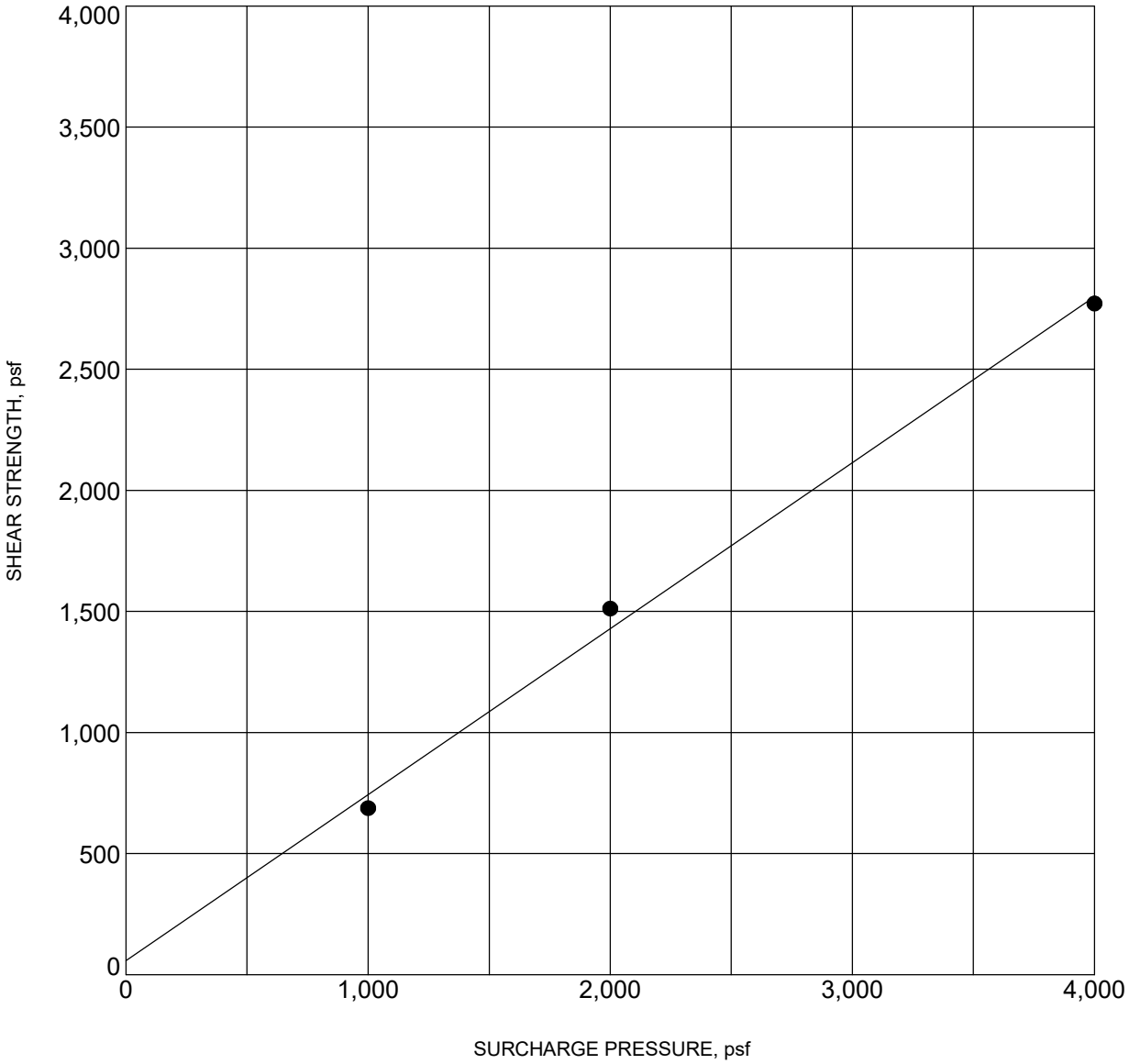
Converse Consultants

Lake Gregory Regional Park Sitewide Sediment Management
City of Crestline, San Bernadino County, California
For: J. Smith and T. Muli

Project No.
23-81-115-01

Drawing No.
A-2

Project ID: 23-81-115-01.GPJ; Template: COMPACTION



BORING NO. :	**SP-04**	DEPTH (ft) :	**0-2**
DESCRIPTION :	**SILTY SAND (SM)**		
COHESION (psf) :	**60**	FRICTION ANGLE (degrees):	**34**
MOISTURE CONTENT (%) :		DRY DENSITY (pcf) :	

NOTE: Ultimate Strength. Samples remolded to 90% of the maximum dry density.

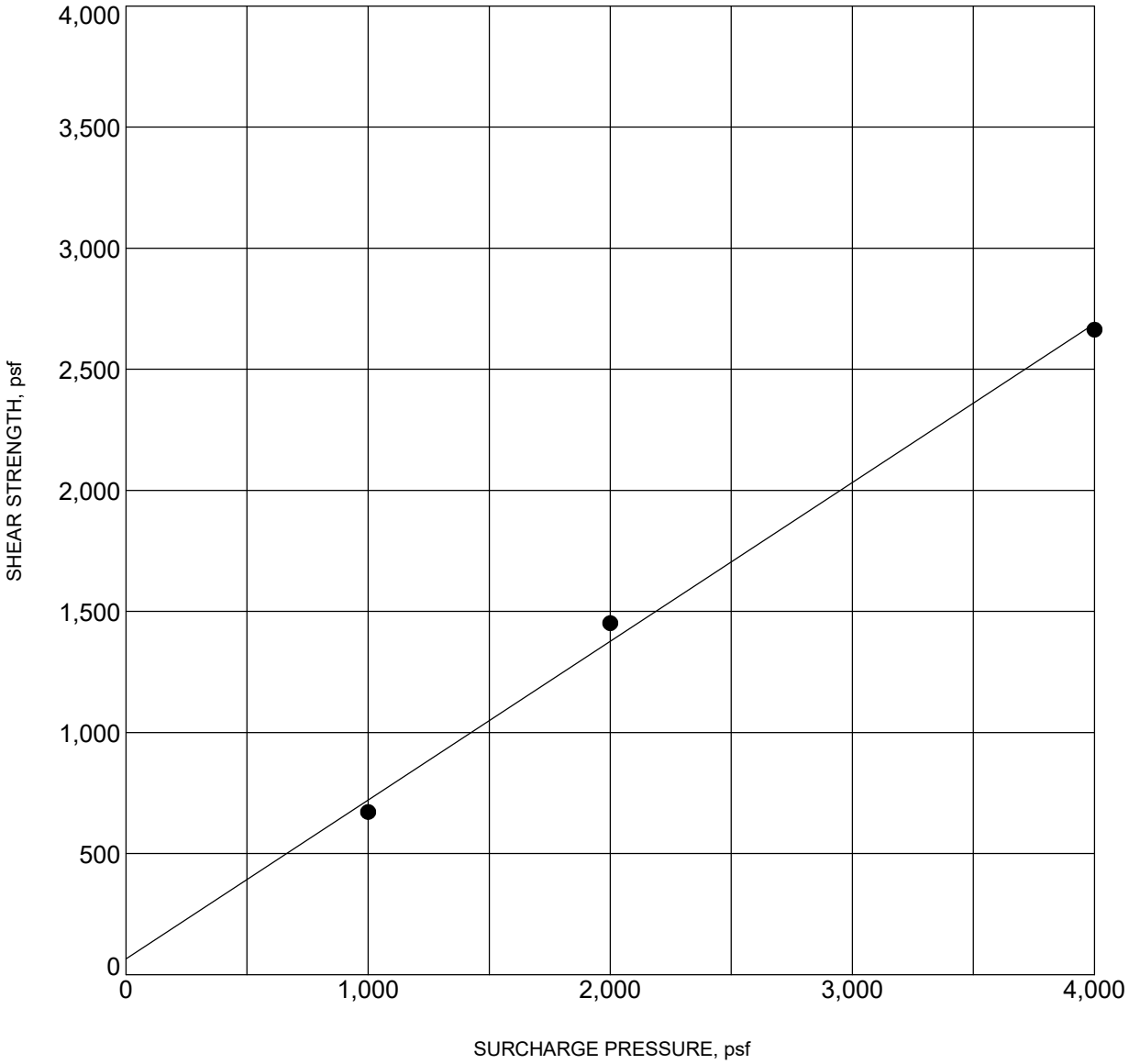
DIRECT SHEAR TEST RESULTS

Converse Consultants

Lake Gregory Regional Park Sitewide Sediment Management
City of Crestline, San Bernadino County, California
For: J. Smith and T. Muli

Project No. **23-81-115-01**

Drawing No. **A-3**



BORING NO. :	**SP-07**	DEPTH (ft) :	**0-2**
DESCRIPTION :	**SAND WITH GRAVEL (SP)**		
COHESION (psf) :	**70**	FRICTION ANGLE (degrees):	**33**
MOISTURE CONTENT (%) :		DRY DENSITY (pcf) :	

NOTE: Ultimate Strength. Samples remomded to 90% of the maximum dry density.

DIRECT SHEAR TEST RESULTS

Converse Consultants

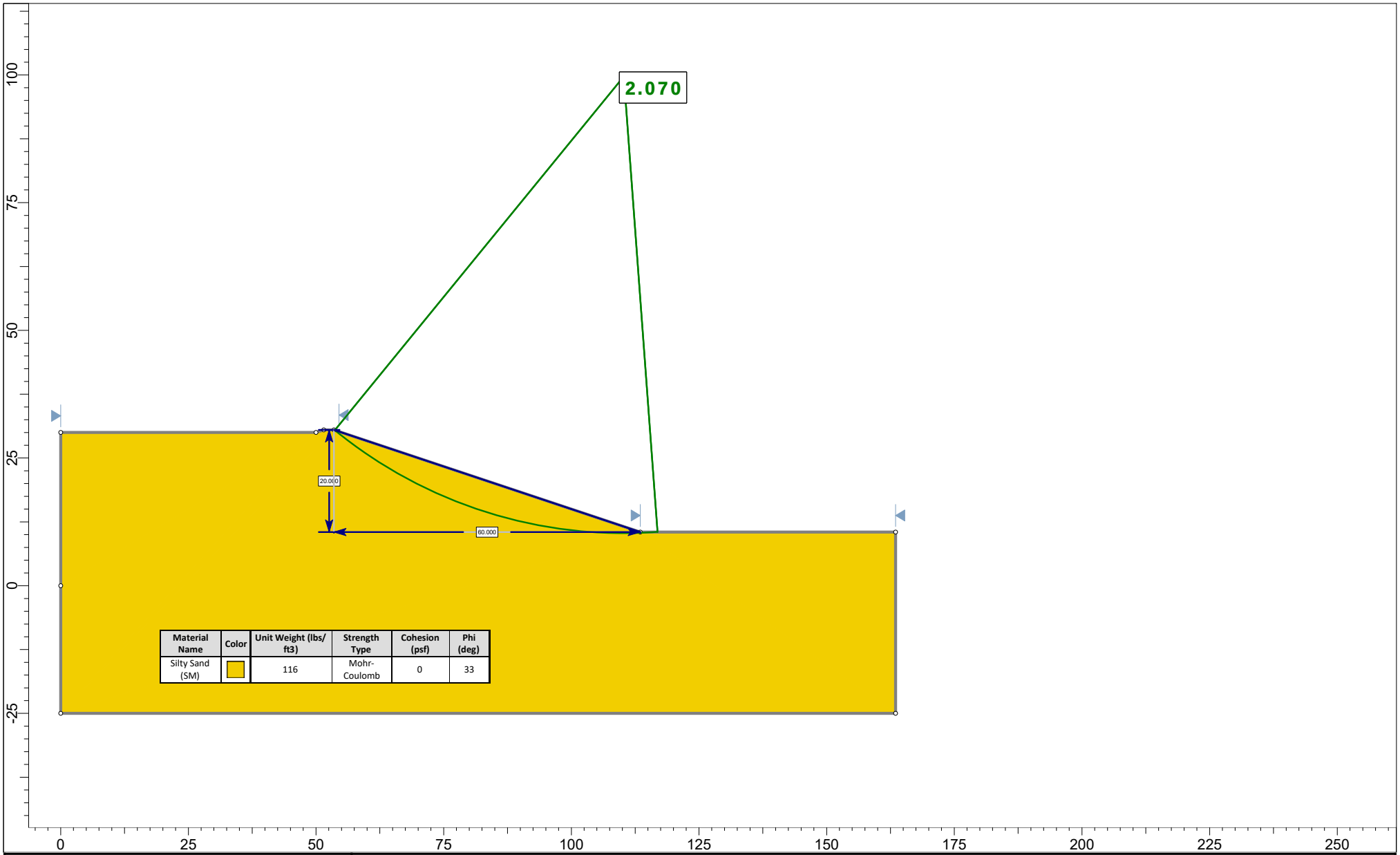
Lake Gregory Regional Park Sitewide Sediment Management
City of Crestline, San Bernadino County, California
For: J. Smith and T. Muli

Project No. **23-81-115-01**

Drawing No. **A-4**

Appendix B

Slope Stability Analysis Results



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Silty Sand (SM)		116	Mohr-Coulomb	0	33

rocscience

SLIDEINTERPRET 9.023

Project	Lake Gregory		
Group	Dry	*Scenario*	Static
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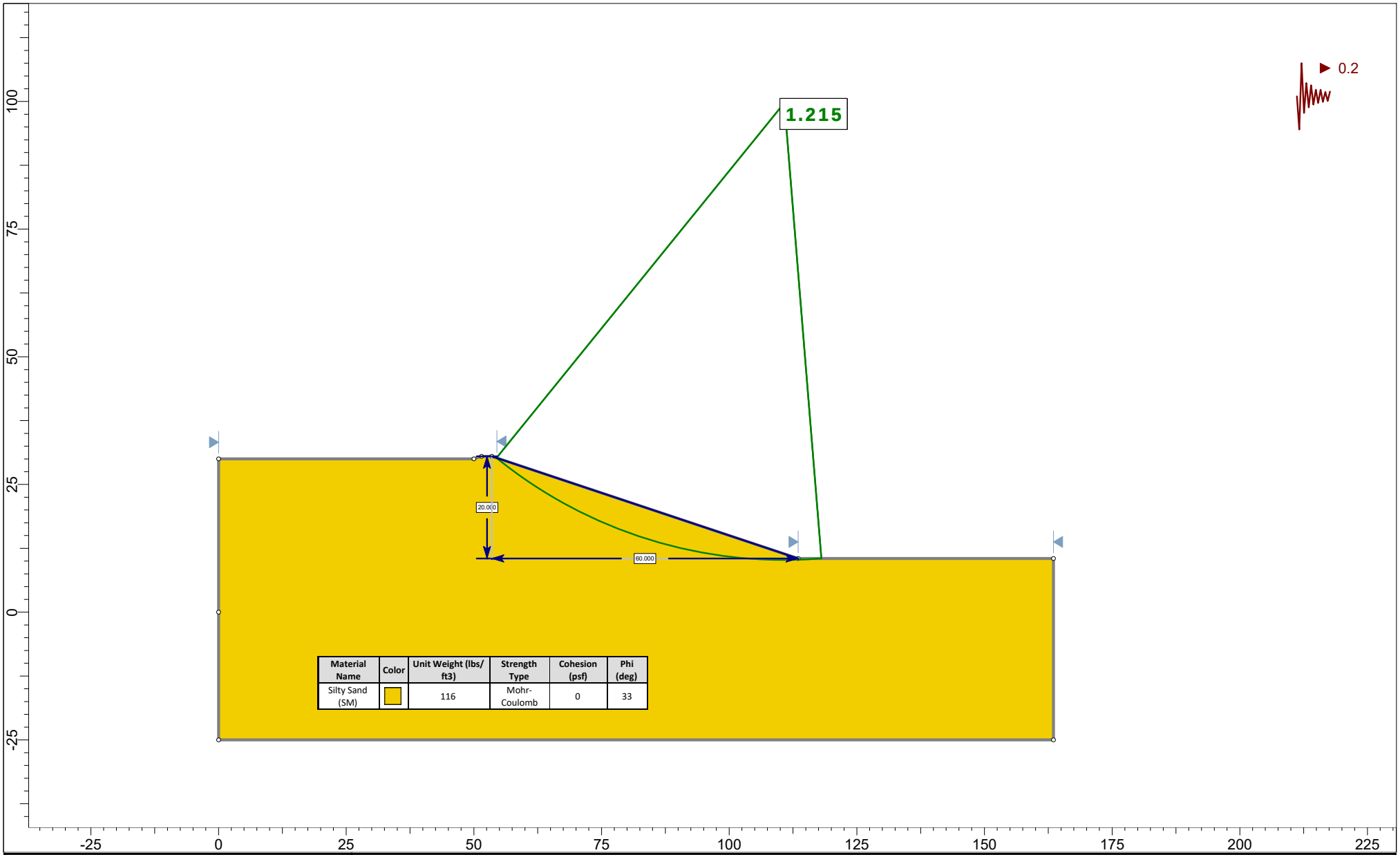
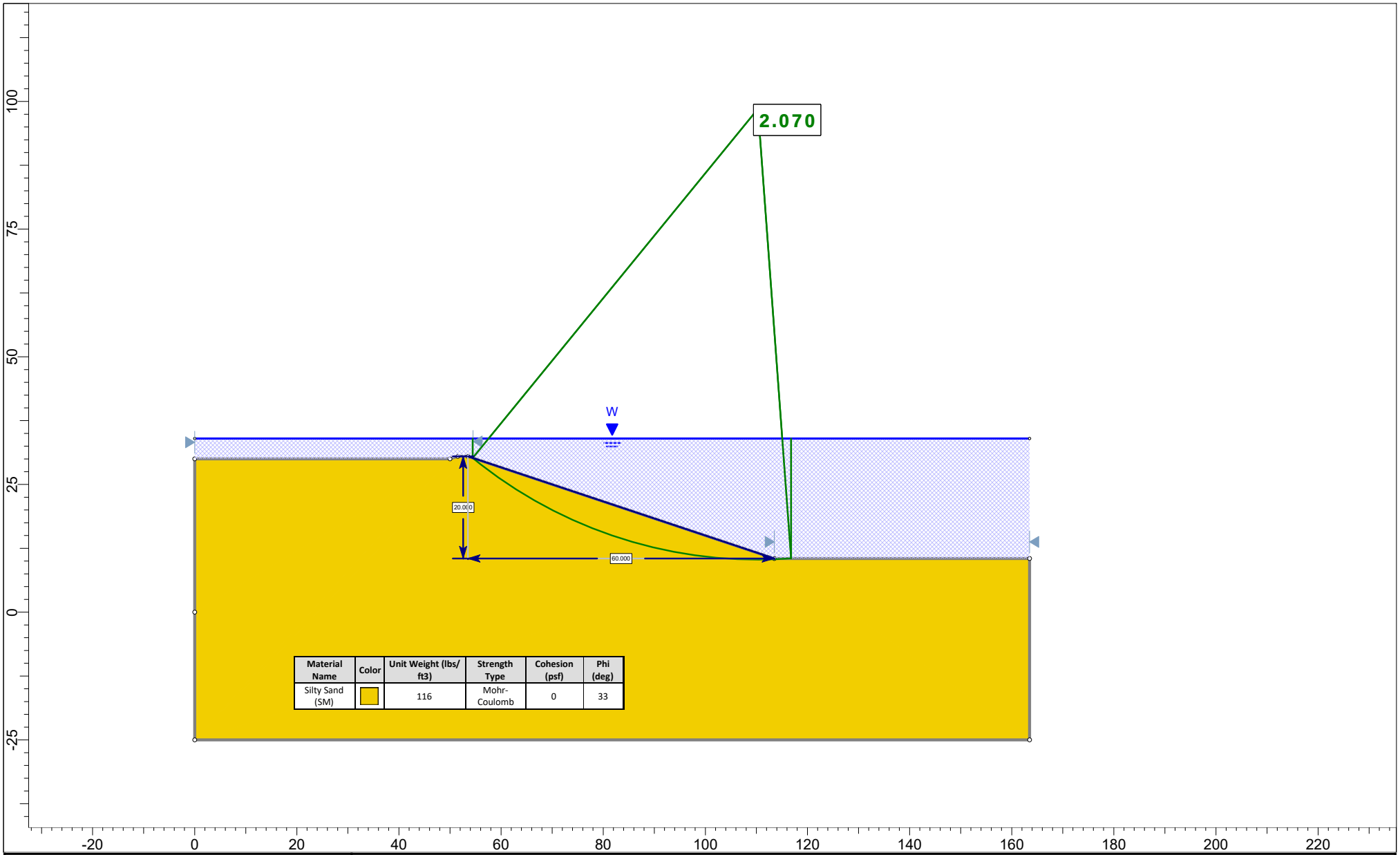


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Silty Sand (SM)		116	Mohr-Coulomb	0	33

rocscience

SLIDEINTERPRET 9.023

Project	Lake Gregory		
Group	Dry	*Scenario*	Pseudo-Static
Drawn By	Jack	*Company*	Converse
Date	8/10/2023, 12:18:51 PM	*File Name*	Dry.slmd

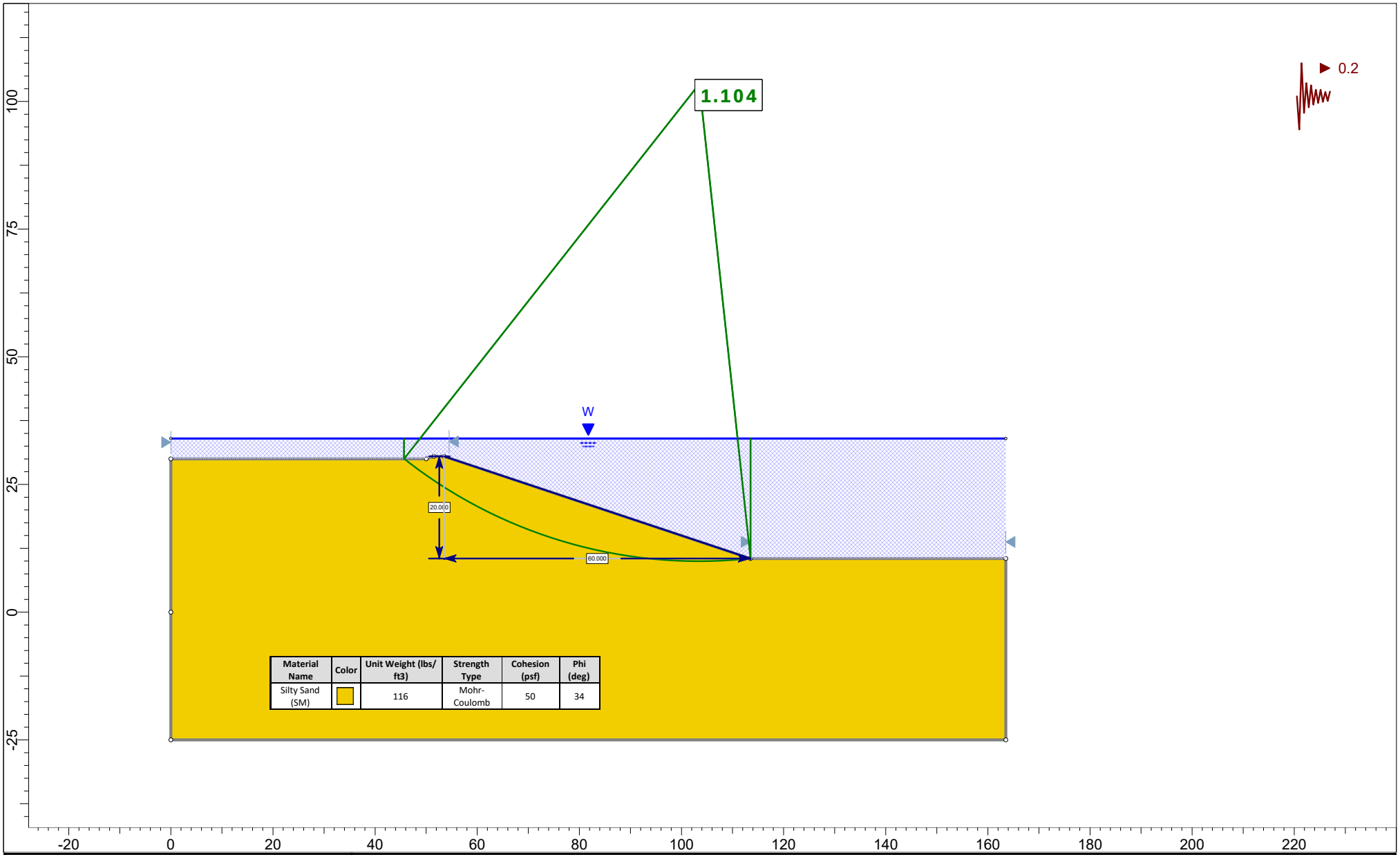


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Silty Sand (SM)		116	Mohr-Coulomb	0	33

rocscience

SLIDEINTERPRET 9.023

Project	Lake Gregory		
Group	Fully Submerged	*Scenario*	Static
Drawn By	Jack	*Company*	Converse
Date	8/10/2023, 12:18:51 PM	*File Name*	Dry.slmd



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
Silty Sand (SM)		116	Mohr-Coulomb	50	34

rocscience

SLIDEINTERPRET 9.023

Project	Lake Gregory		
Group	Fully Submerged	*Scenario*	Pseudo-Static
Drawn By	Jack	*Company*	Converse
Date	8/10/2023, 12:18:51 PM	*File Name*	Dry.slmd

Appendix I – Lake Gregory Operations and Maintenance Manual

Lake Gregory Operations and Maintenance Manual

Prepared by:

J. SMITH & T. MULI

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MAY 2024

Printed on 30% post-consumer recycled material.

Table of Contents

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1 Introduction

Lake Gregory is located in the unincorporated community of Crestline within the San Bernardino National Forest in San Bernardino County, California within Section 23, Township 2 South, Range 4 West and is included within the lands shown on the U.S. Geological Survey (USGS) — North quadrangle, 7.5 Minute Series topographic map. The San Bernardino County Regional Parks Department (Regional Parks) operates Lake Gregory as a regional park that offers recreational facilities to its patrons including seasonal swimming and year-round boating, shore and boat fishing, picnic facilities, exercise stations, a skate park, and a dog park. Beach areas including the North Shore and the South Shore are open to the public for swimming during summer months from Memorial Day weekend through Labor Day weekend. Lake Gregory Boat House is open year-round and offers rental for belly boards, aqua cycles, pedal boats, kayaks, stand-up paddle boards, row boats, and electric motorboats. The South Shore also offers covered picnic shelters for large group picnics year-round. In the summer of 2014, Lake Gregory began offering summer waterpark activities including an inflated 13,755 square foot water-play structure that floats in the lake swim cove.

The lake was created with the construction of an earthen dam built in 1938 along the northeast shoreline. It has an approximate 90-acre surface area. The water sources for Lake Gregory are direct rainfall, storm runoff, and snow melt from the 1,200-acre tributary watershed. Houston Creek East and Houston Creek West are the two major tributaries that deliver storm runoff to the lake. When the water surface reaches elevation 4,523.60 feet it discharges water from the lake through the primary lake spillway to Houston Creek North. The normal water level of the lake is at the ordinary highwater mark (OHWM) at elevation 4,526.0 feet. The maximum lake depth at the OHWM is approximately 56-feet. The water level of the lake can be increased to elevation 4526.6 feet with the installation of flashboards across the secondary spillway to store additional runoff in the lake during spring and summer months. Typically, the flashboards are removed on September 10th of each year. The normal water surface in the lake recedes approximately to elevation 4,518.6-feet during the dry season due to evaporation, evapotranspiration, and infiltration losses.

A debris basin was constructed on the west side of Lake Gregory Drive adjacent to the Crestline Library (the Library Debris Basin). It is characterized as a wetland with ponded water from snow melt and urban runoff, vegetation, and sediment. In the past, excessive vegetative growth in the basin has hampered maintenance activities and prohibited County maintenance staff from removing accumulated sediment and debris from the basin. The basin accessibility and debris trapping efficiency were improved as a part of the Sediment Management Project in 2016.

Historically, sediment would bypass the Library Basin and accumulate at the westerly tip of the lake near Lake Gregory Drive forming a sand delta in the lake (see Figure-1).

Historically, sediment also accumulates at the southerly tip of the lake near Houston Creek South outlet to the lake adjacent to San Moritz Lodge and along the bank at the Houston Creek East outlet to the lake. The sediment accumulation in these areas has decreased the storage capacity/volume of the lake (see Figure-2).

Figure 1. Lake Gregory Westerly Tip Sedimentation Pattern

Figure 2. Lake Gregory Southerly Tip Historic Sedimentation Pattern

2016 Lake Gregory Sediment Management and Bio-Retention Project:

In an effort to reduce the amount of sediment and silt entering the lake and to reduce the accumulation of sediment buildup along the shore where tributaries enter the lake, the San Bernardino County Special Districts Department (Special Districts) sponsored the Lake Gregory Sediment Management and Bio- Retention Project (sediment management project). The existing Library Debris Basin was re-constructed and improved. The southern portion of Lake Gregory was re-contoured to re-establish lacustrine area for enhancement of the surrounding riparian willow (Willow Island). A new in-line basin/channel was constructed to capture sediment and debris from Houston Creek South. An existing access road adjacent to the new basin/channel was improved for all-weather maintenance and vehicular access.

As a part of the sediment management project, the Library Debris Basin was improved. The improvements included clearing and grubbing existing vegetation, removal and disposal of accumulated sediment in the existing basin to the 4,524-feet elevation contour, re- grading of the basin side-slopes on the northeast and southeast comer; construction of a reinforced concrete weir box outlet; installation of an articulated concrete block mattress armoring for the basin invert, and an 8-feet wide access ramp with a maintenance equipment pad at the northeast corner adjacent to Lake Gregory Drive. Rip-rap energy dissipation aprons were added at the basin inflow locations. The improvements extend the lake body into the basin and allow the basin to function as a wet pond or extended dry detention basin, dependent upon the lake water level. Photos of the Library Basin are provided in Figure-3.

Figure 3. Improved Library Debris Basin

The Houston Creek South outlet to Lake Gregory located adjacent to the San Moritz Lodge was improved by constructing an in-line multi-cell debris basin and improving the existing access road by paving over it with a 14ft wide soil cement armoring along the northern and western perimeter of the existing baseball field for maintenance and vehicular access. This reach of Houston Creek South is frequently referred to as "The San Moritz Channel." The channel/basin invert and a portion of the side slope (half of the channel wall height) was lined with a 2-ft thick layer of light class rock riprap. The upper portion or half of the slope was planted with native vegetation and stabilized with turf reinforcement matting. Photos of the San Moritz Channel/Basin are provided in Figures-4, 5, and 6. Note the location of the fence along the easterly side of the San Moritz Channel access road as shown in Figure-5

Figure 4 San Moritz Channel/Debris Basin

Figure 5 San Moritz Channel Access Road

Figure 6 San Moritz Channel Geotextile

The San Moritz Channel was designed to trap sediment within the segmented reaches where it can be removed at a lower cost compared to sediment that it is transported of the lake. Figure-7 shows a plan view of the San Moritz channel design segments and in-channel basin facilities. Note the plan shows a fence along the easterly edge of the access road creating a barrier between the tur field area and the channel access road.

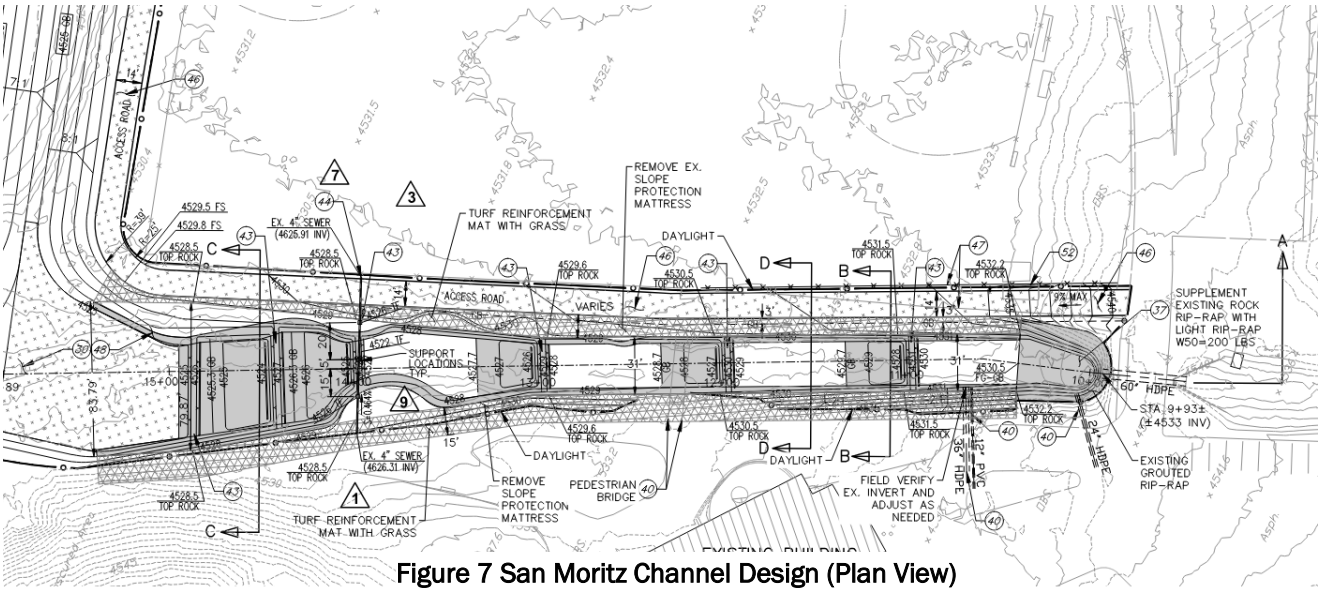

Figure 7 San Moritz Channel Design (Plan View)

Figure-8 shows a profile view of the San Moritz channel design segments and in-channel basin facilities.

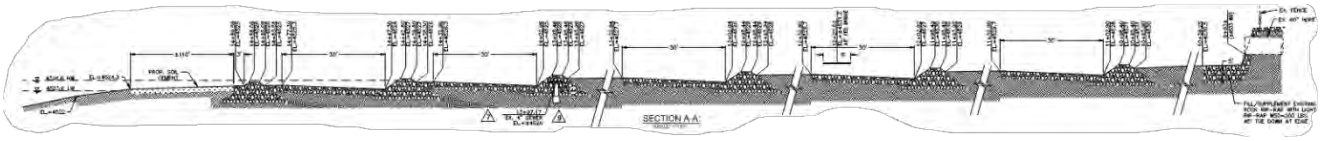

Figure 8 San Moritz Channel Design (Profile View)

It is not clear which storm frequency the San Moritz Channel inline basins were designed to handle. Currently, the inline basins are filled to capacity annually. This indicates that the inline basins were likely designed to trap sediment for storms corresponding to the 2-yr storm or smaller. Basin/channel facilities requiring semi-annual or annual cleanout require clear maintenance access to minimize disturbance to surrounding area improvements during maintenance. Since the time that the San Moritz Channel improvements were constructed the turf field area along the easterly bank of the channel was improved. As a part of the turf area improvement the access for the San Moritz Channel was redefined as a community trail/exercise path around the turf area. A fence was constructed along the westerly edge of the access road/exercise path between the San Moritz Channel and the access road/exercise path. The fence is a barrier to maintenance access and does not allow for ingress/egress access to the channel. As a result, the surrounding area is disturbed by construction and maintenance equipment accessing the San Moritz Channel using alternative access routes that were not designed for ingress/egress nor intended for that purpose. Figure-9 shows the current condition of the access road/exercise path and the barrier created by the fence between the San Moritz Channel and the access road/exercise path. It appears that if the split rail fence was removed the access road/exercise path could be used for dual purpose to allow maintenance access of the San Moritz Channel and community use of the exercise path. We recommend removing the fence to improve maintenance and operation of the San Moritz Channel facility.

The San Moritz Channel/Basin Outlet, and Lake Gregory East Bank area was improved by removing 0.85 surface acres of the sand / sediment that formed a delta where the creek drains to the lake. Figure-10 shows the as-built condition

Figure 9 San Moritz Channel Geotextile

of the grading that was implemented in this area and will be restored again as part of the Sediment Management Project.

In 2023 the Special Districts office implemented a project to Manage Sediment in Lake Gregory. As a part of the Sediment Management project the Lake Gregory Waterpark and West Beach area will be improved to create a stabilized sand beach and an area that should have adequate water depth for the waterpark from Memorial Day to Labor Day. Figure-11 shows a cross section view of the proposed beach stabilization improvements for the West Beach area. A beach stabilization wall will be constructed to create a horizontal and vertical grade control marker defining the beach. Future maintenance crews can use the top of beach stabilization wall as a vertical marker to restore grades when grooming the beach sand in the beach area.

A portion of the lake invert in the vicinity of the West Beach will be graded to create a deepened area that will have a minimum 10ft of water depth at the typical lowest water level during the swim season when the water recedes to 4518.6 ft on Labor Day. The footprint and proposed grading of the waterpark area is shown in Figure-12. This area will need periodic inspection to ensure that deposition of material in the lake does not fill in the area and decrease the design to less than 10-ft minimum.

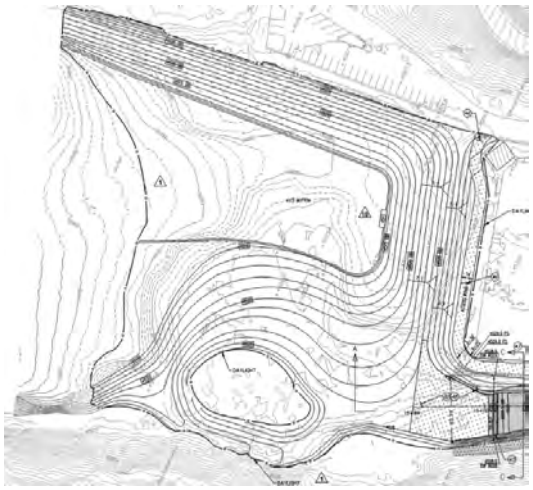

Figure 10 East bank Sediment Removal As-Built Grading

The lake dredging and grading operation that will occur as a part of the Sediment Management Plan will result in a grading cut of approximately 69,428 cubic yards of sediment from the lake bottom. Construction of the proposed swim beach improvements will result in a grading fill of approximately 8,932 cubic yards of soil. Approximately 4,312 cubic yards of the fill will be imported sand to create a high contrast sand surface in the swim beach area to improve visitor safety. Approximately 59,496 cubic yards of sediment will be exported from the site to a designated stockpile area near Camp Switzerland.

Twelve (12) of the thirty-four (34) existing storm drain outlets that discharge storm runoff to Lake Gregory from

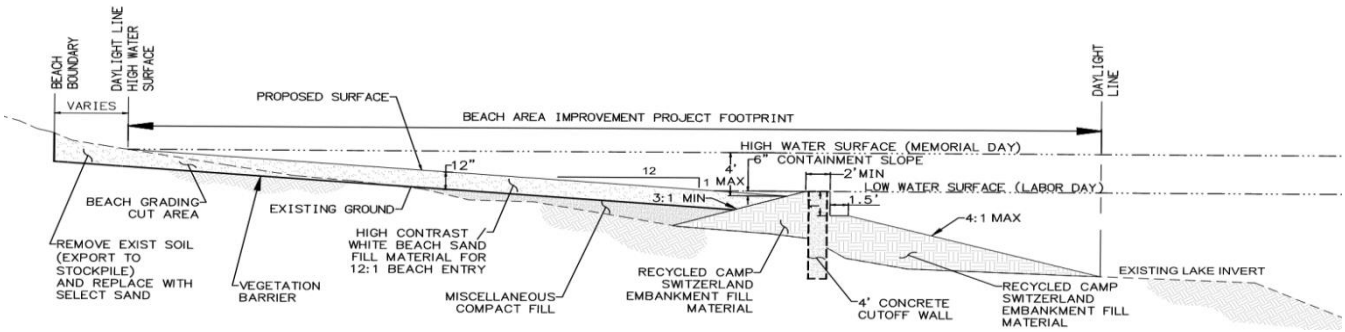

Figure 11 Lake Gregory Swim Beach and West Beach Grading and Beach Stabilization Detail

the tributary

watershed exhibit significant erosion at the stormdrain outlet; see Figure-13. In several cases the erosion is extreme and has completely undermined the stormdrain and created a potentially dangerous situation. In other cases, the erosion is not as dramatic, but still threatens to compromise the integrity of the stormdrain and lake bank. As a part of the Sediment Management Project these twelve stormdrain outlets will be reconstructed to remediate the erosion damage and install erosion control/protection measures that will limit future erosion damage. These locations along with the twenty-two (22) other stormdrain outlets should be inspected periodically and any noted necessary maintenance repairs implemented to prevent major erosion damage development.

Staff gauges will be installed in the Library Basin

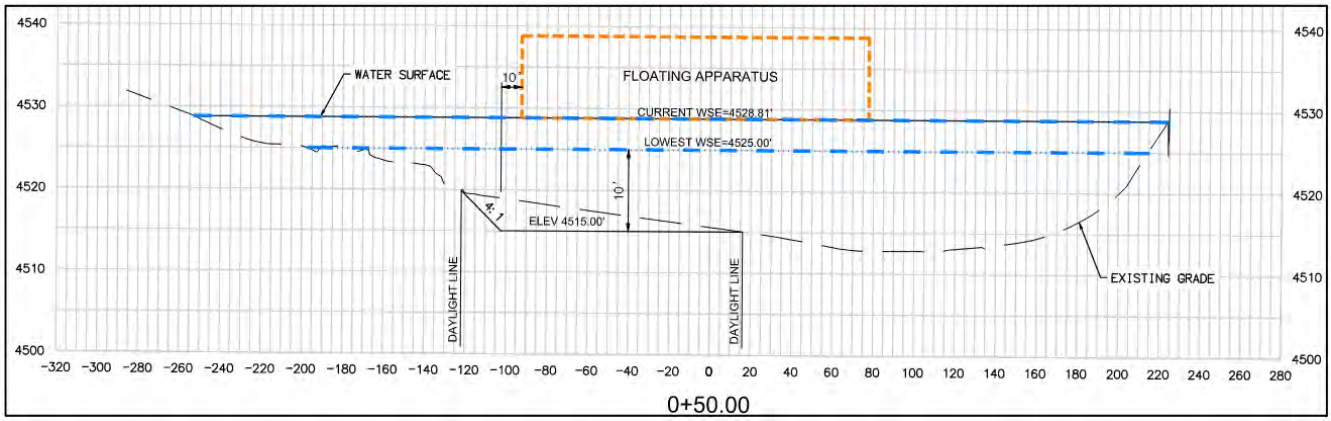

Figure 12 Lake Gregory Floating Waterpark Area Grading Detail

as part of the Sediment Management Project to provide a visual indication of the amount of sediment accumulated in the basin. The Library Basin can hold up to 3.5 feet of sediment from the basin invert elevation to the outlet weir elevation at 4,526.50-feet. When the basin sediment storage capacity is full to 3.5ft deep any additional sediment is then transported from the basin to Lake Gregory. The sediment storage function of the basin is short circuited, and sediment flows into Lake Gregory and deposited in the West Beach area. It is critical to monitor and maintain the basin storage capacity in order to significantly decrease sediment transport from the local watershed to Lake Gregory. West Houston Creek is the second largest individual sediment source for Lake Gregory. The proposed staff gauges will provide an accurate visual indicator of the current amount of sediment stored in the basin and the amount of storage capacity remaining. The staff gauges will have very simple markings that say, "HALF FULL", and "FULL". Table 3-1 provides the sediment storage rating at each elevation so that San Bernardino County

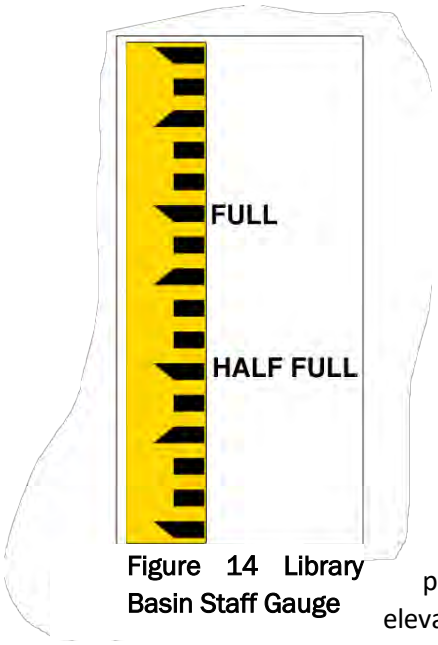

Figure 14 Library Basin Staff Gauge

Figure 13 Extreme Stormdrain Outlet Erosion

maintenance staff can determine how much sediment needs to be removed from the basin prior to initiating basin maintenance activities.

Lake Gregory Operations and Maintenance

This maintenance manual was prepared for San Bernardino County Regional Parks Department staff to use as a guidance document for maintenance activities at Lake Gregory and the associated debris basins and facilities. It provides specific maintenance requirements for the debris basins and general maintenance recommendations for the overall lake. This manual is divided into five (5) parts: Resource Agency Permit Compliance, Library Debris Basin Maintenance, San Moritz Lodge Basin/Channel Maintenance, Lake Gregory Waterpark and Westerly Beach Area Maintenance, and General Lake Gregory Operations and Maintenance.

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2 Resource Agency Permit Compliance

The lake and the adjacent riparian and wetland areas are within the jurisdiction of the California Department of Fish and Wildlife (CDFW), the Lahontan Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (USACOE). There are three permits that cover O&M procedures for Lake Gregory and the associated facilities as follows: the Section 404 permit, the Section 401 permit, and the Fish and Wildlife Code 1602 permit. The following sections are guidelines for operation and maintenance of the lake and facilities, and they pertain to the permits. In addition to the permits mentioned above, there may be other special use permits required by the National Forest Service and the County of San Bernardino.

The 404, 401, and 1602 construction permits were obtained for the construction of the sediment management project improvements. Separate 401, 404, and 1602 permits must be obtained for long term operation and maintenance of sediment/debris basins. In addition, Special Use permits are required for removal of sediment/debris and vegetation control. When the permit applications are filed for a long-term period, the term for operations and maintenance should be specified for a minimum of 5 years or as necessary dependent on the resource agency terms.

2.1 United States Army Corps of Engineers Clean Water Act Section 404 Permit

The USACOE regulates ”discharge of dredged or fill material” in wetlands and Waters of the United States, which includes tidal waters, interstate waters, and "all other waters, interstate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce or which are tributaries to waters subject to the ebb and flow of the tide" (33 C.F.R. 328.3(a)), pursuant to provisions of Section 404 of the Clean Water Act.

“Waters of the U.S.” are delineated based upon me "ordinary high-water mark" (OHWM) as determined by erosion, the deposition of vegetation or Debris, and changes in vegetation within rivers and streams. The normal water level at Lake Gregory is set by the dam spillway at 4,523.60 feet above mean sea level (AMSL). The locations proposed for maintenance sediment removal occurring below 4,523.60 AMSL would be subject to the jurisdiction of the USACOE. Additionally, the USACOE would assert jurisdiction over the tributary ephemeral channel in the San Moritz Lodge Debris Basin/Channel area and wetland resources In the Houston Creek West - Library Debris Basin. The existing Library Debris Basin located next to the library was determined to be a wetland under the jurisdiction of the USACOE. The site was identified to have wetland hydrology, hydric soils, and hydrophytic vegetation present. The delta and channel in the Houston Creek South project area were not identified to meet the three parameters for wetlands.

Requirements and Restrictions

The USACOE has issued permits to regulate the Sediment Management Project components pursuant to section 404 of the CWA: Library Basin — Nationwide Permit 43, Storm Water Management Facilities (SPL- 2016-00673-LRS); Waterpark and Westerly Beach Area- Nationwide Permit 16, Return Water from Upland Contained Areas, and Nationwide Permit 33, and San Moritz Lodge Basin/Channel — Nationwide Permit 43, Storm Water Management Facilities (SPL-2016-00643-LRS). Long term maintenance permits will be obtained from the USACOE that will establish specific regulations for typical maintenance activities. In general, it is expected that the long-term maintenance permits will include the following regulations:

Spawning Areas:

Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized. The fish spawning season is generally March through July.

Migratory Bird Breeding Areas:

The permittee is responsible for ensuring compliance with the Federal Migratory Bird Treaty Act and California Fish and Game Code which prohibit the "take" active bird nests, eggs, and fledglings. Specific nesting bird seasons, survey requirements, and reporting requirements will be set forth in the 404, 401 and 1602 permits, which must be implemented. Mitigation measure (BIO-1) adopted by San Bernardino County Regional Parks to address nesting birds in the Lake Gregory Sediment Management & Bioretention Program Initial Study (January 2014) sets forth the following requirements:

- **BIO-1:** Vegetation removal associated with the development of the proposed basin facilities, channel, and lake sediment removal shall be scheduled to occur outside of the bird nesting season (March – September). Should vegetation removal occur during the nesting season a nest clearance survey shall be conducted no more than 30 days prior to removal of vegetation/trees and the vegetation removal shall be monitored by a qualified biologist.

Migratory Birds and Bald and Golden Eagles:

The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permit is necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

Permitted Maintenance Restrictions

Any authorized structure or fill should be properly maintained, including maintenance to ensure public safety and compliance with applicable Nationwide Permit (NWP) general conditions, as well as any activity specific conditions added by the district engineer to an NWP authorization. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soft disturbance.

2.2 Regional Water Quality Control Board 401 Certification/Waste Discharge Requirements

The RWQCB regulates activities pursuant to Section 401(a)(1) of the federal Clean Water Act (CWA) as well as the Porter Cologne Act (Water Code section 13260). Section 401 of the CWA specifies that certification from the State is required for any project requesting a federal license or permit to conduct any activities Including, but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The Porter Cologne Act requires any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state to file a report of discharge. Discharge of fill material into "waters" of the State which does not fall under the jurisdiction of the USACOE pursuant to Section 404 of the Clean Water Act, may require authorization through application of waste discharge requirement or through waiver of Waste Discharge Requirements.

The RWQCB with jurisdiction over the Lake is the Lahontan (6V) Regional Board. Lake Gregory is identified in the Water Quality Control Plan for the Lahontan Region (Basin Plan) as a waterbody within the Mojave Hydrologic Unit 628.00, Upper Mojave Hydrologic Area 628.20, and assigned the following beneficial uses: municipal supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); navigation (NAV); contact and non-contact recreational uses (REC-1, REC-2); commercial and sport fishing (COMM); cold freshwater habitat (COLD); wildlife habitat (WLD) and spawning, reproduction, and development (SPWN).

Permitted Maintenance Restrictions

The locations proposed for maintenance sediment removal would be subject to a Section 404 Permit from the USACOE, and therefore were also require a 401 certification from the Lahontan RWQCB. Similarly, the Lahontan RWQCB would regulate long-term maintenance activities.

2.3 CEQA Compliance

San Bernardino County prepared an Initial Study and Mitigated Negative Declaration (IS/MND) for the Project. The IS/NND was prepared pursuant to the California Environmental Quality Act (CEQA Public Resources Code 21000, et seq.) and circulated under State Clearinghouse No. 2014011063. The IS/MND was certified on June 24, 2014, following public review.

The Water Board, acting as a CEQA Responsible Agency in compliance with CCR, title 14, section 15096, has considered the IS/MND for the Project and the potential water quality impacts. As a result of the analysis, the Water Board finds potential water quality impacts are less than significant.

The IS/MND also considered the impacts of operation and maintenance of the lake facility and found the impacts to be less than significant in each of the CEQA categories investigated including Aesthetics, Agricultural and Forest Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems.

2.4 California Department of Fish and Wildlife Streambed Alteration Agreement

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the law requires any person, state or local governmental agency, or public utility to notify the CDFW before beginning an activity that will substantially modify a river, stream, or lake. A section 1602 permit was issued by the CDFW for this project.

Impacts associated with culvert maintenance and sediment removal are not defined and would occur on an as-needed basis as determined by the park operations staff. All culvert pipe repair and maintenance activities would be performed year-round as needed to maintain restore proper function of storm drain outlets prior to storm events and to repair them after storm damage. All culvert maintenance should be conducted using equipment situated outside of the lake’s OHWM.

Permit Maintenance Requirements

An agreement was obtained from the CDFW for the following maintenance activities:

Library Debris Basin

- Sediment removal
- Cleaning trash and Debris
- Weir box maintenance
- Access ramp maintenance

San Moritz Lodge Debris Basin/Channel

- Channel clearing/vegetation management
- Sediment removal
- Diversion structure - rock weir maintenance

Reporting of Maintenance Activities

San Bernardino County Regional Parks (Regional Parks) is required to submit a report to CDFW annually for the term of this agreement that describes the maintenance activities conducted within the permittee-maintained facilities during the previous calendar year. The report should include: (a) a map identifying the locations where maintenance activities were conducted; (b) a summary of the annual maintenance activities conducted, including: location, type of activity, time of year activities that were conducted, duration of activities, methods/equipment used to conduct activities, quantity of sediment removed, quantity and type of vegetation removed, and total area of impact for each location; and (c) a list of avoidance and minimization measures implemented during maintenance activities to protect fish and wildlife resources. The report summarizing annual maintenance activities is due to CDFW for the calendar year no later than January 31st of the following year.

3 Debris Basin Maintenance

3.1 General Debris Basin Maintenance

Regular and normal basin maintenance activities should be conducted between June and November. The following activities should be conducted as determined necessary by Park management/staff to ensure proper function of the debris and sediment basins.

All debris basin side slopes should be maintained during the Fall season each year (prior to the winter rain/snow season) to preserve invert accessibility for maintenance vehicles and equipment. The tasks to be completed during this period include periodic tree and shrub pruning and removal(s) adjacent to the access ramps and working areas to maintain ingress/egress paths and working areas in the basins. Accumulated sediment removal at the designated locations would be completed by mechanical means including wheeled and tracked vehicles in October of each year and following significant storm events.

Maintenance of the basins will require permits from the state and federal resource agencies (Section 1602 Streambed Alteration Agreement, 404 Authorization, and 401 Water Quality Certification). These permits must be reviewed in January of each year to ensure that they are still valid for the upcoming year's maintenance. In order to avoid permit violations, all sediment removal should be completed while equipment is located above the lake's OHWM in designated working areas or on the designated side slope access ramp(s). Care should be taken to preserve the side slope vegetation as much as practical to provide enhanced riparian and wetlands habitat.

3.2 Specific Basin Maintenance

3.2.1 Library Basin Maintenance

Houston Creek West enters the lake through the Library Basin on the west side of Lake Gregory Drive adjacent to the Crestline Library. Improvements to this basin constructed in 2016 included removal of accumulated sediment, construction of a maintenance equipment pad and access ramp, and construction of a weir box outlet to improve sediment retention. There are twelve (12) inlet pipes that discharge to the basin. Riprap is installed near all basin inlets to prevent erosion. Historically the majority of the debris entering the basin consists of sand and silt. The basin weir box outlet structure is intended to retain sediment in the basin and decrease the likelihood of it flowing through the basin into Lake Gregory.

The basin weir wall has eight (8) 6-inch diameter orifice holes cored through it that are buried below a gallery of gravel to act as a low-flow outlet from the basin to Lake Gregory. The inverts of the orifice holes are at elevation 4,523.45-feet. This is 1.45 feet above the basin invert elevation at 4,523.00-feet. The basin could have 1.45-feet of standing water below the low-level outlet. As designed, the basin can store up to 3.5 feet of sediment from the basin invert elevation to the outlet weir elevation at 4,526.50-feet. The maximum volume of debris/sediment that can be stored in the basin below the weir outlet elevation is 1,740 cubic yards. The outlet weir structure (weir box) discharges to the existing three 60-inch reinforced concrete pipe (RCP) culvert which drains to Lake Gregory beneath Lake Gregory Drive. The basin functions as either a wet pond or extended dry detention basin. When the lake water surface reaches elevation 4,523.45-feet the lake will reverse flow through the weir box low-flow orifice openings and flow into the basin. Lake Gregory can reach a maximum safe water surface elevation of 4,526.60-feet. This exceeds the weir elevation and provides sufficient depth for fish to leave the main body of Lake Gregory and swim into the

basin. Maintenance of the basin will require periodic field inspections. Basin maintenance needs should be based upon visual inspections and observations. A Visual Inspection Checklist for the Library Basin is provided in Appendix-A. The checklists are intended to be used for guidance on post storm maintenance activities.

3.2.1.1 Debris Removal

Accumulated debris within the bed of this existing debris basin should be removed by mechanical means including wheeled and tracked vehicles when necessary following major storm events (>1" precipitation) in the watershed, or at a minimum annually. Permit restrictions require that no wheeled or tracked vehicles be allowed on the vegetated basin side slopes except on the designated access ramp(s). Care should be taken to preserve the side slope vegetation as much as practical to protect enhanced riparian and wetlands habitat.

Staff gauges were not installed as a part of the basin improvement project. Staff gauges should be installed in the basin at three locations to give an accurate reading of the sediment depth that can allow for an accurate calculation of the sediment volume. Auxiliary staff gauges should be installed in the locations indicated on the Basin Modification Map provided in Appendix-B. Post storm maintenance is required in addition to normal periodic maintenance when debris levels in the basin exceeds the staff gage mark that indicates the basin sediment depth is at or greater than 2-feet deep. As designed, the basin can store up to 3.5 feet of sediment from the basin invert elevation to the outlet weir elevation at 4,526.50-feet. The maximum volume of debris/sediment that can be stored in the basin below the weir outlet elevation is 1,740 cubic yards. When there are 2-feet of debris uniformly across the invert of the basin, the removal volume will be approximately 1,000 cubic yards. When there is 1-foot of debris uniformly across the invert of the basin, the removal volume will be approximately 500 cubic yards. Table 3-1 shown below provides the depth-storage relationship for the Library Basin so that the basin debris volume can be estimated quickly with depth readings from the staff gauges that are to be installed.

Table 3-1. Library Basin Debris Storage Volume

Library Basin Sediment Storage Volume			
Basin Invert Elevation (ft)	***4523.0-ft***		
Elevation (ft)	***Debris Depth (ft)***	***Surface Area (sq-ft)***	***Stored Debris Volume (cy)***
4523.0	0.0	10,800	-
4523.5	0.5	11,557	249
4524.0	1.0	12,314	498
4524.5	1.5	13,071	747
4525.0	2.0	13,829	996
4525.5	2.5	14,586	1,245
4526.0	3.0	15,343	1,494
4526.5	3.5	16,100	1,744
4526.5			**Outlet Weir Elevation = Max Debris Storage Volume**

Maintenance Requirements

The basin can store 1.45-feet of water below the low-level outlet. Static pools of water less than 2-ft deep with very little or no wave action are breeding grounds for mosquitos. This basin should be stocked with mosquito fish

(Gambusia affinis) on a regular basis and/or treated with BTI mosquito control pellets periodically by San Bernardino County Vector Control staff.

Reverse flow from Lake Gregory into the basin will likely displace gravel from the gravel gallery at the basin side of the weir box wall low level outlet. This gravel gallery should be re-established such that the orifice holes should be completely covered with approximately 1.5 feet of gravel.

Sediment removal should be conducted on a semi-annual basis and after large storm events at minimum. Accumulated sediment within the debris basin should be removed to the basin invert at the surface of the articulated concrete block mattress. The estimated total volume of sediment removal is approximately 1,400 cubic yards per year corresponding to common annual storms (1-year return interval). For estimation of the accumulated sediment associated with certain forecast rainfall events, refer to Table 3-3.

Trees and/or shrubs adjacent to the basin access road and on the basin side slopes below the weir elevation (4,526.50-feet) should be pruned/trimmed/removed as determined necessary to maintain vehicular and equipment access. . Sapling trees should be removed adjacent to maintenance access areas to maintain clear access. If vegetation and tree removal is deemed necessary during the nesting season, a nest clearance survey should be conducted no more than 30 days prior to removal of vegetation/trees and vegetation removal should be monitored by a qualified biologist.

Sediment removal and tree and shrub pruning can be performed outside of the bird nesting season for raptors and passerines without any nest survey requirements. If activities involving vegetation removal or pruning is conducted within the nesting bird season, a preconstruction nest survey must be conducted within 30-days prior to initiation of the work to ensure there is no take of active nests, eggs, or fledglings. The nesting season is defined as March through September under Mitigation Measure Bio-1 in the adopted IS/MND.

Maintenance of Access Road and other Appurtenances

Maintenance of the access road is required. The constructed clear area and width and length of the access road should be maintained clear for safe ingress/egress and maintenance. In addition, maintenance activities will require clearing and trimming of brush and debris removal activities to maintain access and or restore access to parking and turnaround areas, basin outflow structure(s), and reconstruction or repair of fences/gates, access railings and stairs, inlet pipe structures/outlets, riprap, facing slabs, and staff gauges (to be installed in the future). Basin structures may require periodic graffiti removal.

Storm Damage Repair and Restoration Projects

Storm damage repair and restoration of existing structures back to pre-storm conditions includes eroded or damaged slopes and embankments, down drains, inlet and outlet pipes and related structures, rock riprap, and other on-site structures.

If sediment removal activities will be conducted when the basin has ponded or flowing water, appropriate Best Management Practices (BMPs) are required prior to starting the work consistent with California Stormwater Quality Association (CASQA) construction BMPs for stormwater pollution prevention plans (SWPPP).

3.2.1.2 Maintenance Equipment

A maintenance pad adjoins the parking lot north of the debris basin should serve as the staging area for equipment required to maintain the debris basin. A list of anticipated heavy equipment necessary for basin maintenance is provided below. The anticipated process of debris removal would utilize a small skid steer such as a Bobcat skid steer accessing basin invert via the 8-feet wide access ramp. The *Bobcat* would stage debris in the northeasterly corner of the basin within the reach of an excavator situated on the maintenance equipment pad. The excavator would then load the debris into dump trucks for disposal of the materials at designated location. Heavy equipment access shall be restricted to the access ramp, basin invert, and equipment pad. No heavy equipment should be used to traverse the basin side slopes for regular maintenance.

Anticipated Heavy Equipment Needs

- Tracked excavator with minimum reach of 30-ft
- Wheeled or tracked *mini-skid steer (Bobcat)*
- Three-axle 10-yd dump truck

3.2.2 Tributary Stormdrain Maintenance

The stormdrains tributary to the Library Debris Basin will require regular maintenance. The stormdrain inlets should be inspected on a quarterly basis year-round and before each forecast storm. The anticipated maintenance will require trash and debris removal to ensure the inlet is clear . This can be accomplished with hand tools, a Bobcat with a material loading bucket, and truck to haul away debris.

3.2.3 Visual Inspections

Basin maintenance requires periodic inspection as the trigger to initiate supplemental vegetation trimming and removal and Debris removal in addition to normal scheduled cyclical maintenance. Visual inspection should be conducted on a quarterly basis to prevent excessive vegetation growth or debris accumulation between normally scheduled basin maintenance. In addition to quarterly inspections, inspections should be scheduled following significant storm events; storm events with greater than 1-inch of precipitation. Visual inspections should note the following.

1. depth of debris deposition at the staff gauge near the weir box
2. presence of fallen and dead trees
3. the amount of vegetation undergrowth

All normal basin maintenance activities including debris removal, tree trimming, and brush clearance, should be conducted outside of the bird nesting season and to reduce risk of fire hazard, when possible. A preconstruction nesting bird survey will be required within 30-days prior to any work conducted in the nesting bird season that involves tree and vegetation trimming or clearing or would involve passing through an area that is outside of the designated access path

3.2.4 San Moritz Lodge Debris Channel/Basin Maintenance

The San Moritz Lodge Debris Basin/Channel is located near the southeast corner of the lake near the athletic fields and the San Moritz Lodge. A basin was developed on the south side of the Houston Creek East inlet to the lake. Accumulated sediment was removed, and additional riprap was provided to stabilize the streambed and protect the bank protection. The existing channel was reconstructed and regraded to restore flow capacity. The debris basin is an inline multistage linear basin within Houston Creek East. During the summer months when the lake flashboards are in place, the higher water surface submerges the basin, and it is not readily visible. When the flashboards are removed and the water level recedes, the channel / basin is visible. The improved channel section/debris basin includes a combination of riprap and vegetation to provide slope protection. The channel was constructed as a staircase type channel with relatively flat reaches joined by a small vertical drop. The basins are constructed on each tier of the channel drops. An adverse slope was created on each tier to create a small storage basin on each tier. Low flows and debris get trapped in the various tiers of the basin. Higher flowrates overtop the basin high point (berm) and spill to the next tier and ultimately out to the lake.

A soil cement access road was constructed to provide access for maintenance equipment and vehicles to the eastern side of the basin and along the southern edge of Lake Gregory. Some time after construction of the channel maintenance access road, a split rail fence was installed between the access road and the channel (see Figure-9), and the access road was repurposed as a community trail/exercise path. The access road/community trail no longer provides ingress/egress for small equipment to access the San Moritz Channel. However, it can still be used by larger equipment such as an excavator which can reach over the fence between the San Moritz Channel and the access road/community trail from the access road / community trail without damaging the fence. The basin should be inspected quarterly for as-needed debris and sediment removal, and restoration of the rock weirs, earthen bottom, and reinforced side slopes. During the summer, with the flash boards installed, the water level elevation in the lake rises to an elevation of 4,526.6 feet (NGVD 29) for recreational use. During winter, the flash boards are removed and the water level in the lake drops to the lake spillway elevation of 4,523.6 feet (NGVD 29).

3.2.5 Debris Removal

Accumulated debris within the bed of the debris basin/channel should be removed by mechanical means using a tracked excavator when necessary following major storm events (>1” rainfall) in the watershed, or at minimum semi-annually. The basin has vegetated side slopes stabilized by a turf reinforcement mat (TRM). The slopes are part of the mitigation area established for the Sedimentation Project. Mechanical equipment cannot be driven on the slopes. However, an excavator which can reach over the fence between the San Moritz Channel and the access road/community trail from the access road / community trail can be used to remove debris from the San Moritz Channel without damaging the fence. A dump truck staged on the access road to receive material retrieved from the channel would be needed to haul away excavated material.

The San Moritz Channel Basins are very small and shallow. The maximum storage depth of each cell in the basin is 2-ft. Staff gages are not necessary in a very shallow basin. However, elevation markers are proposed to be installed as part of the Sediment Management Project in order to aid maintenance staff in restoring the design shape/depth/volume of the basin(s) during debris removal procedures. Elevation markers will be installed in the basin at key locations to give an accurate indication of the original elevation at that point so that heavy equipment operators have a visual indicator of their target grades. Elevation markers will be installed in the locations indicated on the Sediment Management Project Improvement Plans. Post storm maintenance is required in addition to normal periodic maintenance when debris levels in the basin reaches the maximum storage depth and

fills up to the weir elevation marker for each basin which indicates the basin sediment depth is at 1-feet deep. As designed, the basin can store up to 1.0 feet of sediment from the basin invert elevation to the weir outlet for each cell of the basin. The maximum volume of debris/sediment that can be stored in the basin below the weirs is 423 cubic yards. When there is 1-feet of debris uniformly across the invert of each of the six levels of the channel/basin, the removal volume will be approximately 423 cubic yards. When there is 0.5-foot of debris uniformly across the invert of the basin, the removal volume will be approximately 128 cubic yards. Table-3.2 shown below provides the depth-storage relationship for the San Moritz Lodge Channel/Basin so that the basin debris volume can be estimated quickly with depth readings elevation markers that are to be installed.

Table 3-2. San Moritz Lodge Channel / Basin Storage Volume

San Moritz Lodge Channel/Basin Sediment Storage Volume				
	Elevation (ft)	*Depth (ft)*	*Surface Area (sq-ft)*	*Stored Debris Volume (cy)*
Stage 1	4525.0	0	1,133	-
	4525.5	0.5	1,649	25.75
	4526.0	1	2,164	61
Stage 2	4526.0	0	892	-
	4526.5	0.5	1,343	20.69
	4527.0	1	1,793	50
Stage 3	4527.0	0	1,834	-
	4527.5	0.5	2,436	39.54
	4528.0	1	3,038	90
Stage 4	4528.0	0	1,677	-
	4528.5	0.5	2,129	35.24
	4529.0	1	2,580	79
Stage 5	4529.0	0	1,718	-
	4529.5	0.5	2,190	36.19
	4530.0	1	2,662	81
Stage 6	4530.0	0	1,021	-
	4530.5	0.5	1,666	24.88
	4531.0	1	2,310	62
San Moritz Lodge Basin/Channel Total Maximum Storage Volume				**423**

Maintenance Requirements

Sediment removal should be conducted on an annual basis in October at minimum as routine maintenance. Accumulated sediment within the debris basin should be removed from the basin invert. The estimated total volume of sediment tributary to the San Moritz Channel/Basin is approximately 2,760 cubic yards per year. The basin can only store 15% of the expected annual debris production from the tributary watershed. Approximately 2,337 cubic yards of debris will flow through the channel/basin into Lake Gregory annually. It is expected that the debris that is not captured in the San Moritz Channel/Basin will accumulate in the lake and form a delta near the interface between the channel and lake as it has historically. For estimation of the accumulated sediment associated with certain forecast rainfall events, refer to Table 3-3.

Channel/Basin Lake Delta Dredging

The San Moritz Lodge Channel/Basin can only store 15% of the expected annual debris production from the tributary watershed. Approximately 2,337 cubic yards of debris will flow through the channel/basin into Lake Gregory annually. It is expected that the debris that is not captured in the San Moritz Channel/Basin will accumulate in the lake and form a delta near the interface between the channel and lake as it has historically. The debris will need to be removed annually to prevent an excessive build up and loss of storage volume in the lake. The majority of the debris will likely be stored in the lake below the OHWM (4525.0-feet). A permit will be required to remove sediment/debris from the lake below the OHWM. Debris should be removed from this area of the lake between Labor Day and March 1st. The lake swim season concludes on Labor Day and fish spawning season is from March through July. The annual sediment removal from this area of the lake is expected to be approximately 2,337 cubic yards. The sediment removal operation will depend on the water surface elevation at the time of removal. If the water surface remains high between Labor Day and March 1st dredging will need to be accomplished with a boat dredge. If the water surface recedes significantly, then dredging may be accomplished with conventional construction equipment such as wheel loaders. The dredging operation will require approximately 240 truck trips with three-axle 10-yard dump trucks to transport the sediment from the lake to the designated storage site.

Maintenance of Access Road and other Appurtenances

Maintenance of the access road is required. The constructed clear area and width and length of the access road should be maintained clear for safe ingress/egress and maintenance. In addition, maintenance activities will require mowing of grass and clearing or trimming of nearby brush and to maintain access to the channel/basin. The access road is underlain with turf reinforcement matting (TRM). Care must be taken to only mow when the soil is firm and can support the weight of the mower to prevent scalping of grass and damage to the TRM. Grass should be cut to no less than a 4-inch stand height to protect the TRM. Grass mowing shall be conducted as needed.

Storm Damage Repair and Restoration Projects

Storm damage repair and restoration of existing structures back to pre-storm conditions includes eroded or damaged slopes and embankments, related structures, rock riprap, and other on-site structures.

Normal Debris removal maintenance activities should not be conducted during the active season of the park while the basin is submerged. If maintenance will be conducted during the off-season and there is flowing water, in the channel appropriate Best Management Practices (BMPs) are required prior to starting the work consistent with California Stormwater Quality Association (CASQA) construction BMPs for stormwater pollution prevention plans (SWPPP).

3.2.6 Maintenance Equipment

A list of anticipated heavy equipment necessary for basin maintenance is provided below. The anticipated process of debris removal would utilize a tracked excavator situated on the access road adjacent to the basin. The excavator would then remove debris from the basin bottom and load the debris into dump trucks for disposal of the materials at designated location. No heavy equipment should be used to traverse the basin side slopes for regular maintenance nor enter the lake below the OHWM without a permit.

Anticipated Heavy Equipment Needs

- Tracked excavator with minimum reach of 30-ft
- Wheeled loader with 3-yard bucket
- Three-axle dump truck

3.2.7 Tributary Stormdrain Maintenance

The stormdrains tributary to the San Moritz Lodge Channel/Basin will require regular maintenance. The inlets to the stormdrain tributary to the basin] will require regular visual inspection and removal of debris. The stormdrain inlets should be inspected on a quarterly basis year-round and before each forecast storm. The anticipated maintenance will be trash and debris removal to clear each inlet. This can be accomplished with hand tools or by hand.

3.2.8 Visual Inspections

Basin maintenance requires periodic inspection as the trigger to initiate supplemental vegetation trimming and removal and Debris removal in addition to normal scheduled cyclical maintenance. Visual inspection should be conducted on a semiannual basis to prevent excessive vegetation growth or Debris accumulation between normally schedule basin maintenance. In addition to quarterly inspections, inspections should be scheduled following significant storm events; storm events with greater than 1-inch of precipitation. Visual inspections should note depth or elevation of Debris deposition relative to the outlet weir, presence of fallen and dead trees, and the amount of vegetation undergrowth. All normal basin maintenance activities including Debris removal, adjacent tree trimming, and brush clearance, should be conducted during the off-season period in October, to avoid the bird nesting season. Basin maintenance conducted between March 1st and Labor Day should only be conducted for special needs such as an emergency, fire hazard, or nuisance to the public, or conditions that are hazardous to public health or safety.

3.2.9 San Moritz Lodge Channel/Basin Mitigation Area Maintenance

In order to mitigate the permanent impacts associated with the improvement to the West Basin, the County re-established/created/enhanced a riparian willow habitat area (Willow Island). The mitigation area is located on the banks of the San Moritz Lodge Channel/Basin adjacent to San Moritz Lodge and adjacent to the soil cement access road. According to the mitigation plan, San Bernardino County is responsible for the implementation, performance, and long-term management of the mitigation area.

Maintenance Requirements

Maintenance of the mitigation site includes removal of non-native vegetation, removal of trash and debris, and maintenance of the temporary irrigation system. Normal maintenance should be conducted during the offseason on an annual basis in November before nesting season begins. A qualified biologist or restoration ecologist should be on site to observe and advise maintenance staff regarding removal of nonnative vegetation. The mitigation area should not contain more than 5% non-natives and nonnative vegetation should be removed for a 5-yr period. This 5-year period begins after the channel is seeded/planted in accordance with the specifications set forth in the resource agency approved Habitat Mitigation and Monitoring Plan.

Maintenance of Access Road and other Appurtenances

Maintenance of the access road is required. The constructed clear area and width and length of the access road should be maintained clear for safe ingress/egress and maintenance. In addition, maintenance activities will require clearing and trimming of brush and debris removal activities to maintain access to the area.

Maintenance Equipment

A list of anticipated heavy equipment necessary for mitigation area maintenance is provided below. The anticipated process of vegetation trimming, and tree removal would utilize hand tools and manual laborers to load cuttings into a chipper/shredder. A box truck would then remove chipped cuttings from mitigation area. No heavy equipment should be utilized in the mitigation area.

Anticipated Heavy Equipment Needs

- Chipper/shredder
- Box truck

3.2.10 Debris Production

In natural and developed watersheds storm runoff produces sediment through the forces of erosion and produces debris by mobilizing debris in the watershed. In stormwater nomenclature sediment, trash, and other deleterious materials are frequently referred to as "Debris." Debris production or Debris yield from watershed is very difficult to accurately determine. Several empirical methods have been developed for estimating the Debris production in a watershed for specific storm events and for average annual watershed yield. The Debris yield for the watershed tributary to Lake Gregory has been estimated for specific design storms and average annual volume.

Specific Storm Debris Production

Debris production analyses were performed to determine the debris produced in the watershed tributary Lake Gregory (*Albert A. Webb, 2013*) for large storm events. The debris yield for each watershed was determined using the USACOE Los Angeles District Debris Estimation Method. The soil loss from sheet and rill erosion is specific to storm intensity. The sediment yield was computed for the 1-hour duration storm event corresponding to the 2-yr through 10-yr storm intensity. Calculated estimated storm sediment yields are provided in Table-3-3 provided below.

Table 3-3. Sediment Yield Summary using USACOE LA District Method

Basin ID	Watershed Area(ac)	Debris Yield (cy)		
		0.92 inches (2-yr, 1hr)	***1.21 inches (5-yr, 1hr)***	***1.46 inches (10-yr, 1hr)***
A	415	3,782	4,560	5,161
B	853	11,122	13,305	14,953

Debris production analyses were performed to determine the debris produced in the watershed tributary Lake Gregory (*Albert A. Webb, 2014*) for large storm events. The debris yield for each watershed was determined using the National

Resource Conservation Service (formerly SCS) Revised Universal Soil Loss Equation (RUSLE). The RUSLE equation estimates watershed soil loss from sheet and rill erosion on an annual basis. Calculated estimated annual sediment yields are provided in Table-3-4 provided below.

Table 3-4. Average Annual Soil Loss/ Sediment Using the RUSLE Equation

Basin ID	Watershed Area (ac)	Annual Debris Yield (cy)
A	415	1,400
B	853	2,760

4 Lake Dredging

4.1 General Dredging Discussion

Lake dredging should not be required as a part of regular and normal lake maintenance activities. Dredging should only be conducted when sufficient sediment has accumulated in the lake to hinder normal lake operations or reduced the capacity of the lake sufficiently to necessitate removal of the sediment. Dredging should be conducted between Labor Day though Memorial Day outside of the fish spawning season. The following activities should be conducted when lake dredging is deemed necessary by Park management/staff to ensure proper functioning of the lake.

Lake dredging can be accomplished with either a boat mounted dredge or conventional construction equipment such as a wheeled-loader and excavator. The water surface elevation at the time of dredging would be the indicator for determining which equipment to use for the lake dredging operation. If the water surface is high and the subject dredging area(s) are below the water surface, then a boat dredge would likely be required. If the water surface is low, and soil is firm/dry enough to support equipment weight, then conventional construction equipment could be used to dredge. Additionally, a contractor could dewater portions of the lake by building a temporary coffer dam or berms and dewatering the work area while the temporary berms hold water back from the work area. During the dredging operation, the sediment that is removed from the lake will need to be temporarily stockpiled near the lake and dewatered. Both the dredging operation and the dewatering operation will require a water quality control plan or similar plan to guide implementation of Best Management Practices (BMPs) to protect the water quality of the lake from turbidity. There are numerous measures that can be implemented to protect the lake water quality during the dredging, stockpiling, and dewatering operations. A few recommended measures are described below.

4.2 Dredging BMPs

During the dredging process sediment is stirred up from the bottom of the lake and put into suspension in the water column. Depending on the specific gravity of the sediment particles it can stay in suspension for a short time or a very long time. We recommend that a floating turbidity barrier be deployed around the dredge area to contain suspended sediment in the work area and prevent migration of a sediment plume into the main body of the lake

4.3 Stockpiling BMPs

Depending upon the techniques used to accomplish the dredging the stockpile operation may effectively be a grading operation moving saturated sediment with earth moving equipment or it may be pumped to the stockpile area. In either case, the appropriate BMP is to provide full containment of the work area with a barrier such as gravel bags and/or silt fence.

4.4 Dewatering BMPs

Dewatering of the sediment stockpile will also depend on the technique used to dredge the material. If a dredge barge is employed the boat could pump the saturate sediment slurry to a slurry sock which will capture the sediment and allow the water to seep out. If conventional earth moving equipment is employed then a full

containment berm or barrier would be required to desilt water before it drains back to the lake. In either case, the appropriate BMP is to provide full containment of the dewatering area with a barrier such as gravel bags or silt fence.

4.5 Export of Dredge Material

The sediment material removed from the lake will be temporarily stockpiled adjacent to the lake to dewater the material prior to transport to an appropriate permanent location. The permanent location of sediment removed from the lake will be dependent upon availability of a location at the time of dredging. The permanent location will likely be a county owned facility such as Camp Switzerland which currently functions as a stockpile for debris removed from the lake and debris basins. However, there are also opportunities to broker the material for a nearby earthwork project or an active landfill that is accepting soil. There are also soil brokers that coordinate suppliers and buyers that could facilitate removal of the material from the site. In any case, the soil will need to be loaded into 10 cubic yard capacity 10-wheel dump trucks and trucked off site. The loading operation will be accomplished with a wheeled loader. The trucks will be staged on site and will traverse back and forth between the loading site and the receiving site.

5 Lake Gregory Operations and Maintenance

This Lake Gregory Operations and Maintenance Manual provides guidance and recommendations for each distinct area of the lake including the debris basins and creek outlets into the lake. Each area has unique physical characteristics that require ongoing operations and maintenance. Each area is addressed separately for clarity, although some of the operations and maintenance activities are common to several areas. Visual observation checklists have been prepared for maintenance staff to use as guidance documents to determine thresholds at which certain maintenance activities should be initiated.

Lake and Shoreline Operations and Maintenance Activities

The Lake Gregory Water Park operational season is from Memorial Day through Labor Day each year. From Labor Day through Memorial Day the waterpark is closed to the public and is non-operational. Maintenance of Lake Gregory will entail a number of maintenance activities that are limited to the park non-operational period only for health and safety reasons. While some maintenance activities are required to be conducted during the park operational season.

The process of keeping the lake aesthetically and functionally optimal consists of a number of operational and maintenance procedures. In essence, operational procedures are used to maintain good water quality in the lake. Water quality is a broad assessment of a variety of physical, biological, and chemical characteristics of the water in the lake. In general, good quality is judged by the absence of elements that interfere with the intended use or enjoyment of the lake. For example, clean, clear water with little or no algae or weed growth is generally regarded as a good quality for aesthetic viewing, but it may not be a good quality for fish growth. Fish cannot survive in sterile water because they require food and oxygen to survive. In addition, organic matter in the water (fish feces, plant Debris, such as weeds and leaves, etc.) cannot degrade acceptably without bacteria and sufficient oxygen. Suspended material causing turbidity (such as clays, silts, organic Debris, etc.) or floating Debris in a lake is aesthetically unacceptable. Excessive plant growth (algae, aquatic weeds, and vegetation) and floating Debris are generally undesirable and cause more complaints from lake users and visitors than all other indicators of water quality. Though objectionable to lake visitors, some plant blooms are inevitable and may be beneficial to the lake ecosystem. In essence, the lake must operate as a nearly balanced ecosystem to satisfy the majority of its users or visitors at a reasonable cost. It is a difficult task to satisfy every person who uses or visits the lake because each user applies different measures of water quality depending upon their intended use of the lake. For example, a casual park visitor or lakeshore observer typically wants clear, clean water, free of odors, free from nuisance bugs (mosquitoes, midges, and others), free from floating algae and Debris, and with no visible weeds. However, the angler wants to catch trophy sized fish with no aquatic weeds to tangle his lines. Anglers often regard aquatic plants, both emergent and floating, as an indicator of good water quality. These conflicting opinions and uses must be resolved or mutually informed to coexist and to achieve a successful lake; a lake that meets the intended goals/purpose(s).

5.1 Lake Management Goals at Lake Gregory

Lake Gregory is a dedicated manmade community recreational lake that has many intended uses to serve xxxx annual visitors. The uses for Lake Gregory include full body contact uses such as seasonal swimming, and year-round partial body contact uses such as boating and fishing. In addition, the lake offers shoreline cabanas, picnic areas, a marina, lodging, and wedding venues. Currently, Lake Gregory is not a drinking water supply facility. The management goal for the lake is to provide a lake that will support recreational uses with a minimum disturbance to active and passive lake users and other park visitors.

In order to ensure that the intended use objectives for the lake are met, specific minimum standards or goals for lake operation should be established. Periodic corrective action may require time to accomplish them. In these cases, lake maintenance staff should diligently pursue the cause of any deviation from the minimum standards, assess the problem with regard to lake uses, initiate corrective action, and inform responsible personnel of the progress in meeting standards. The recommended lake water surface/operational standards are as follows:

1. Floating Debris - Floating Debris (trash, leaves, fish etc.) should be held to a minimum by daily collection during routine patrol of the lake each working day.
2. Water Clarity - A Secchi Disk reading of two (2) or more feet should be maintained. Should the water turbidity be less than this standard, immediate steps should be taken to determine the cause and corrective action should be taken. Rapid changes in the readings are an indication of developing problems.
3. Dissolved Oxygen - A minimum of five (5) milligrams of oxygen per liter (mg/l) is desirable to protect the fishery and aquatic life in the lake. Should oxygen levels drop below the minimum as indicated by routine monthly monitoring, the cause should be determined, and corrective action initiated.
4. Algae - Some algae growth is essential in maintaining a balanced ecosystem in the lake. Objectionable growths of algae (those that interfere with the intended uses of the lake or cause odors and unsightly conditions) should be identified and controlled by appropriate action.
5. Aquatic Plant Growth - Aquatic plant growth is good for wildlife, the fishery, and the lake ecosystem. However, if aquatic plant growth interferes with any of the intended uses of the lake should be identified and controlled by appropriate action, physical removal and cutting rather than chemical controls.
6. Vector Control-A Lake vector identification and control program should be developed. An effective lake vector control program will control shoreline vectors such as rats, mice, gophers, squirrels, etc. In addition, flying inset vectors such as mosquitoes, midge flies, house flies, hornets, etc. need to be controlled as well. We recommend natural vector control methods through creating and supporting a balanced ecosystem where there is a balance of food sources, predators, and prey at each level of the food chain.
7. Waterfowl Population Control - Excess waterfowl can be devastating to lake water quality. Waterfowl produce more waste per unit body weight than bovine. An effective resident waterfowl population control program should be developed.
8. Water Level Control - The lake water level should be maintained within normal limits to preserve the shoreline conditions.
9. Rule Enforcement and Lake Patrol - All rules and regulations pertaining to the use of the lake and maintenance of the lake's quality should be enforced by routine patrol of the lake by authorized personnel. Violations of rules should be entered in a Lake Log and reported to the Lake Manager for action.
10. Lake Log-A Lake log should be maintained by the lake management staff. The objective of a log is to establish a chronological record of all pertinent data relative to lake quality and rule violations, such as,

but not limited to water clarity, plant growth, water level, water temperature, oxygen content, insect infestations, waterfowl population growth, rule infractions, trespass, equipment malfunctions, etc.

Periodic inspections, especially immediately following significant runoff events aquatic plant weed control via mechanical weed removal or cutting in February prior to opening of the waterpark and before fish spawning season.

Swim beach area lake bottom footfall and/or foot contact grooming below the water line to a depth of six (6) feet based on current elevation. Grooming will be accomplished manually and mechanically. Workers with landscape and Debris rakes will manually groom the lake bottom surface, removing foreign objects and decaying plant material to an approximate depth of three feet while ensuring a consistent, contoured, and safe foot contact area for swimmers. A power boat pulled drag will be used at low speed to accomplish the same tasks and minimize turbidity to an approximate depth of six (6) feet. All material removed from the lake will be disposed of in a safe and legal manner.

Proposed on-going maintenance activities would be conducted as necessary and limited to the Park Non-operational (off-season) period of September through March. The following activities will be conducted as determined necessary by Park management/staff to ensure protection of the lake, the fishery, and the recreational resources available at Lake Gregory Regional Park.

Sediment removal at local stormdrain outlet locations - Sediment removal should be completed by either hand tools or mechanical means where local stormdrains discharge to the lake at various locations around the lake perimeter. Access and topography vary by location; therefore, excavation methods would be site-specific to each of the outlet locations. Approximately 31 pipe outlets have been identified around the lake perimeter. Regular maintenance is required at each lake outlet. Lake outlets vary in size from 4-inches to 36-inches in diameter and contribute to lake sediment accumulation at varying rates. Lake sediment removal at the stormdrain outlet locations is proposed to occur in October before the beginning of the traditional rainy season and in April at the end of the traditional rainy season, and as determined necessary by the park maintenance staff based upon quarterly inspections.

Sediment removal would occur under the following conditions:

a) Sediment removal: accumulated sediment removal at the designated locations would be completed by mechanical means including wheeled and tracked vehicles when necessary. All sediment removal will be completed while equipment tracks/wheels are located above the lake's OHWM.
b) Culvert pipe repair: sediment loads travelling through inlets to the lake have resulted in clogged inlets in the past. When an inlet is observed to be clogged or flow is observed to be obstructed by sediment by the Park's management/staff, culvert outlet cleaning and grooming will be scheduled. All culvert pipe repair and maintenance activities would be limited to occur during the Off-Season. Access and topography vary at each of the culvert inlets; thus, maintenance methodologies may vary by location; however, this maintenance will not require any equipment to be situated below the lake's OHWM.

Lake Sediment Removal at Outlets - Sediment removal will be completed by mechanical means. Access and topography vary by location; therefore, removal methods would be site- specific to each of the outlet locations.

Stormdrain Repair: sediment loads travelling through inlets to the lake have resulted in clogged inlets in the past. When an inlet is observed to be clogged or flow is observed to be obstructed by sediment by the park's operating personnel, culvert outlet cleaning and grooming will be scheduled. All culvert pipe repair and maintenance

activities would be limited to occur during the Off-Season. Access and topography vary at each of the culvert inlet; thus, maintenance methodologies may vary by location. However, all culvert maintenance should be conducted using equipment situated outside of the lake's OHWM.

Figure X - Lake Outlet Sediment Removal Locations

Stormdrain Outlet Sediment Removal

Stormdrain outlet sediment removal should occur under the following conditions:

1. All sediment removal should be completed by mechanical means including wheeled and tracked vehicles when necessary with equipment located above the lake's OHWM at elevation 4,525-feet.
2. Equipment access areas will be marked to define the work area and minimize impacts to adjacent habitat to the greatest extent practicable.
3. Outlet pipe repair and maintenance, as necessary, should be scheduled during the off-season.

5.2 Lake Ecology Control

As the science of aquatic ecosystem management has matured with new information, it became evident that eradication of a nuisance organism should not be the only management goal to pursue. Better methods of controlling the source or cause of the problem have been developed. The first primary producer by photosynthesis in a lake is algae. Algae blooms are the result of excessive nutrients, sunlight, and carbon dioxide in the water in the absence of a natural algae predator, i.e., zooplankton. If the algae population is "eradicated" with an algaecide, then there would be no food for zooplankton to develop, and therefore no food for higher aquatic species. Gradually, emphasis was placed on the control of nutrients to reduce the algae growth rate to an acceptable level and provide an environment suitable for algae predators. In turn, to keep the zooplankton populations within reason, fish are required to graze on the zooplankton, and so on up the aquatic ecosystem pyramid to the top consumers. In other words, the best aquatic management techniques involve control of nutrients with the establishment of a competitive ecosystem.

Unfortunately, nutrient control is not a complete singular solution. Certain aquatic organisms can still grow out of proportion and restrict the uses of a lake. All aquatic organisms have a limited life cycle, and dead and decaying organisms settling to the bottom of a lake can cause other problems in the overall management of a lake. If the dissolved oxygen is not sufficient in the lake water column for aerobic decomposition by aerobic bacteria, anaerobic bacteria take over with undesirable byproducts (such as, hydrogen sulfide and methane) which can cause odor problems and death of desirable aquatic organisms. In addition, anaerobic decomposition of bottom deposits releases "trapped" nutrients to the water column to grow more algae and macrophytes (higher forms of aquatic plants).

Nutrients can be tied up in desirable aquatic plants and animals in the lake. Certain types of organisms are not as objectionable to the lake user as others. Aquatic vegetation can be grown in controlled containers or locations in the lake to bind nutrients in the lake and provide oxygenation of the lake, food for insects and animals, and shade for fish. Conventional water quality control methods include chemical controls. JS&TM strongly recommends avoiding the use of chemical controls. Lake Gregory is in the Lahontan Region. Chemical controls are not allowed in jurisdictional lakes in the Lahontan Region. The use of chemical controls is outdated and often leads to much larger long term lake water quality problems through the accumulation of adverse side effects from their use.

No singular method or technique will solve all of the problems in an aquatic ecosystem. To achieve a reasonably balanced ecosystem in a lake, the lake manager needs to use a variety of overlapping and complementary techniques to effectively manage, or the varied conditions present in an active lake ecosystem. The selection of a technique(s) should be based on specialized training on the part of the system manager or a knowledgeable consultant following a good monitoring program that pin-points the problem. The recommended monitoring program is discussed in the next item and operational procedures for carrying out the selected program will follow.

5.3 Monitoring Program

The goal of the monitoring program is to provide information that will assist in achieving a balanced aquatic ecosystem and an aesthetically pleasing lake with minimal insect infestations, no fish kills, and minimal uncontrolled algae blooms. All management decisions should be based on sound data and observations. Periodic water quality tests and environmental observations are vital in aquatic ecosystem management. Changes in test results are indicative of potential problems that may be averted by prompt action. The proposed monitoring program is shown in Table 5-1. An explanation of the various monitoring items can be found in Table 5-2. The first couple of years in the monitoring program may show that the number of testing stations and/or frequency of tests may need adjustment. In addition, rapid changes in the physical condition of the lake may require additional tests. A Lake Monitoring Location Map was prepared to show the approximate target locations for lake maintenance personnel to take monitoring readings. The Lake Monitoring Location Map is provided in Appendix-C.

Table 5-1. Monitoring Program

Physical Parameters	**Frequency**
Temperature Profile	M
Secchi Disk Depth	M
pH	M
Suspended Solids	SA
Observation of Algae & Macrophyte Growth	Q
Weather (mean air temperature)	W
Water Level	M
Lake Activities, Remarks	M
Equipment Performance (check)	M
Biological Activities	**Frequency**
Algae Density and Composition	Q
Aquatic Macrophyte Identification	Q
Zooplankton Identification	Q
Midge Counts	SA
Chemical Parameters	**Frequency**
Dissolved Oxygen Profile (DO)	M
Nitrogen (Ammonia, Nitrite, Nitrate)	M
Phosphorus (ortho)	M
General Mineral Analysis	SA

Table 5-1. Monitoring Program

Physical Parameters	Frequency
Sediment Analysis	SA

Symbols

L General Observation of Lake
D Daily
WO Where Observed
W Weekly
Q Quarterly
SA Semi Annually
M Monthly
A Annually

Table 5-2. Explanation of Monitoring Items

Temperature	Lake temperature should be monitored to determine suitability of the lake water for introduction of various aquatic organisms. Determining the vertical temperature profile indicates the cycle of thermal stratification and mixing, which influences the lake oxygen content, nutrient distribution, and organism dynamics. Use portable DO/TEMP meter from boat.
Secchi disk depth	The Secchi depth indicates the relative transparency of the water. A transparent lake is often desirable on an aesthetic basis, but may lead to excessive algae growth and development of submerged macrophyte populations because of the availability of light for photosynthesis. Use disk from boat.
pH	The pH value of water is important for aquatic organism survival. The potential aquatic toxicity of many naturally produced chemicals in the lake (e.g., heavy metals) is influenced by pH. Use pH meter.
Suspended solids	The amount of suspended material in the lake influences lake clarity, development of aquatic plants, and input of particulate nutrients that accumulate in the sediment and become available during lake turnover.
Dissolved oxygen	A minimum dissolved oxygen concentration must be maintained in the lake to protect aquatic life. This will become particularly crucial when balancing and predatory organisms are introduced into the lake. The oxygen distribution also indicates the level of vertical mixing of the water column and the status of temperature and chemical stratification. Maintenance of aerobic water above the sediment protects against the release of potentially toxic unionized dissolved gases and prevents release of many nutrients that accumulate in the sediments.
Nitrogen and Phosphorus species	Ammonia, nitrate, and ortho-phosphate are forms of nutrients that are readily available to aquatic plants. When nutrient levels are high, the potential exists for a subsequent alga bloom. When the amount of suspended phosphate (total minus ortho) and organic nitrogen (total Kjeldahl nitrogen minus ammonia) are high, assimilation of nutrients is indicated. Nutrient availability is often seasonal, and patterns can be defined and used to predict when management action may be needed before unsightly conditions are allowed to develop.

Table 5-2. Explanation of Monitoring Items

Mineral Analysis	A more complete mineral analysis should be made to establish changes in water chemistry other than nutrients. Tests should include carbonate, bicarbonate, chlorides, sulfates, total hardness, calcium, sodium, iron, and total dissolved solids (TDS). Heavy metals and other items may be required by public agencies. Tests can be made by service companies, consultants or testing laboratories.
Algae density and composition	The density of algae strongly influences the aesthetic appeal of the lake system. Monthly monitoring can establish spatial and temporal patterns of algae growth and timing of appropriate management actions. Identification of the species of algae is important in the selection of the appropriate means of physical or biological control.
Zooplankton density	The numbers of zooplankton in the lake indicate the level of balance in the aquatic ecosystem. Zooplankton feed on planktonic algae and serve as a natural control mechanism. They also provide a source of food for many fish species, especially during the fish's early life stages. The forms of zooplankton present serve as indicators of the degree of eutrophication of the lake.
Midge fly larvae quantification	Because of potential problems with nuisance densities of emergent midges in the area surrounding the lake, constant monitoring of the abundance and distribution of the organisms is necessary. The seasonal pattern of abundance can be determined to measure the success of biological and physical control strategies. Water column assessment (performed concurrently with the zooplankton analysis) can indicate when midge pupation is occurring, and emergence is anticipated.
Aquatic macrophyte quantification and identification	The substratum should be routinely checked for development of submerged aquatic plants. In other lakes in the area, macrophytes have completely covered a lake bottom in a relatively short period of time (one to two years) and have been considered aesthetically unacceptable. The species of the plant must be known to determine what management action would be appropriate for control.
Sediment analysis	Sampling the bottom sediments for general quantity and composition (inorganic, organic, organisms) and phosphorus should be conducted in selected lake areas at least semi-annually. Analysis for heavy metals may be required by public agencies. Tests are of value in determining if a dredging program is necessary.

5.4 Lake Water Surface Maintenance

All lakes tend to collect floating debris, oil, grease, and trash in certain areas. This material generally collects in coves or in vegetation along the leeward shoreline. The debris will normally build up on the prevailing windward side of the lake, but other areas will catch Debris because of changing wind and water current patterns. Surface debris will typically consist of aquatic plant fragments, terrestrial vegetation (leaves, twigs, grass clippings, etc.) and trash (paper, cans, plastic bottles, tennis balls, and petroleum products). The amount and nature of the debris will depend on user activities in the park and activities in the watershed as well as natural vegetation and landuses in the watershed.

The principal tasks are removal of floating debris from the surface of the lake and removal of Debris from the bottom of the lake. Typically, floating debris can be removed at the shoreline using nets on long reach poles and a debris/trash can. Larger pieces of flotsam may be removed by hand netting. Bottom debris removal will depend on the type of debris involved. It may be removed with nets, rakes, or by hand. Hydrosoil, which will develop on the bottom of the lake, will consist of soil, dead algae, and other organic debris.

5.5 Algae, Aquatic Plant and Turbidity Control

The growth of algae and aquatic plants depends on nutrient availability, carbon dioxide, and sunlight. Some algae forms are required for a balanced ecosystem. Beneficial algae in water are objectionable only when it grows out of proportion (such as an algae bloom). Filamentous alga (blue green) is objectionable because it forms a heavy scum that floats, attracts flying insects, causes odors, and is somewhat toxic to fish and other marine organisms. Periodic plankton counts and identification tests should be conducted by lake operation personnel or supporting consultants. When undesirable forms or quantities of algae are detected, the lake should be evaluated to determine the source of excess nutrients. Often times the source of excess nutrients is waterfowl excrement and waterfowl feeding from the public. It is of paramount concern to manage the waterfowl population and remove excess waterfowl to protect and restore the lake water quality.

Every effort should be made to achieve a reasonably balanced aquatic ecosystem without the use of chemical treatment that treats symptoms instead of cause. Removal or deactivation of nutrients may be more satisfactory and economical than algaecide or herbicide treatments. See Section 4.14 for a discussion of the use of chemicals in lake ecology.

5.6 Insect Control

Eutrophic lakes are often plagued with large plant growth (macrophyte) and aquatic insect infestations. These two problems often go hand-in-hand, but they can occur separately. Macrophytes are aquatic plants that typically are attached to the bottom, float on the surface, or rest on the bottom. They may be rooted and extend above the water level such as cattails or tules, or they may be soft bodied and submerged such as hydrilla or cattails.

Macrophytes are particularly troublesome in shallow water areas where light can penetrate to the bottom, and where the bottom has not been hardened with soil cement or concrete. Floating macrophytes are generally more of a problem in areas, such as coves, where water currents are reduced, and wind patterns tend to keep the plants in place. Dense growths of macrophytes can cause problems by providing protective shelter for nuisance insects, by creating an area for trash to accumulate. Uncontrolled dense beds of these plants can be unattractive and detract from the aesthetic appeal of the lake water surface.

Mosquitoes can exist in very large numbers in floating or attached algae or in macrophyte growth. They can be eliminated in most cases by controlling macrophyte growth and by introducing mosquito fish (Gambusia affinis) to a lake. Lake systems are usually the first source blamed for the appearance of mosquitoes. Mosquito larvae and midges develop in still water less than 2-feet deep. Other insect midges develop as larvae in the bottom muds, mainly in water less than six (6) feet in depth. At times they will hatch and create nuisance conditions for lakeside users. These insect populations can be reduced by stocking bottom feeding fish (such as catfish and fathead minnows), and/or by disturbing the hydrosoil on the hardened slope (motorboat wake) so that the fish can eat the larvae. Chemical control should be avoided. Encouraging growth of a resident bat population or providing habitat for bats is an effective complementary means of mosquito and insect control along with other methods. Some bat species feed heavily on mosquitoes and can be effective at controlling populations of adult flying mosquitoes

5.7 Erosion Control

Landscaped areas around the lake are generally erosion resistant. If erosion occurs, the water can become turbid and undesirable bottom sediments will form. Damaged landscape areas should be repaired as soon as possible to prevent further damage.

5.8 Employee Training and Emergency Conditions

Employees responsible for lake maintenance and lake patrol should be trained to do the routine cleaning operations necessary, and to spot any pending problems. To do this, the employee should have access to this manual and other literature on ponds, lakes, and ecology.

Every effort should be made to prevent emergencies, but project maintenance personnel should be trained in rescue operations, and know where to get help quickly. They should also be trained to enforce safety rules to prevent accidents. All maintenance personnel should be familiar with the location and operation of equipment to detect and correct malfunctions.

Parents should encourage their children to observe all rules and regulations, and all personnel should inform violators of the rules.

5.9 Trash Collection

Trash containers should be provided in the lake area. Trash thrown on the ground can be unsightly, or it can be blown into the lake. Periodic pick-up by the lake maintenance crew will help, but trash accumulation between pick-ups could be rather unsightly and a nuisance. If everyone cooperates by properly disposing of trash, the lake area will remain more aesthetically enjoyable for all. Floating trash in the lake should be removed by authorized persons only to minimize exposure to untrained persons. Local community members and visitors to the park should not place wood or other floatable material in the lake.

New animal-proof trash bins with lids should be provided at no less than 300-foot intervals around the perimeter of the lake accessible to pedestrians and near all shade structures, walkways, and parking areas.

5.10 Rules and Regulations

We have provided a few suggested rules and regulations concerning lake activities to provide a safer lake environment. All Rules and Regulations should be formally adopted by San Bernardino County. It is sometimes difficult to enforce when the general public has access to the facility, but some rules and regulations are required for good management. Posted rules and regulations will also aid peace officers in enforcing the rules. The following are suggested:

General Lake Rules

1. Tampering with lake or dock equipment is strictly prohibited.

2. No swimming, wading, scuba gear, floating objects (remote control boats are permitted), littering, drinking alcoholic beverages, or glass ware.
3. Fish (such as goldfish, Koi, carp, etc.) should not be placed in the lake.
4. No animals in the lake.
5. Boats, windsurfers, jet skis, jib sails and other similar crafts are prohibited on the lake.
6. Do not drink the lake water.
7. Small children at play in the lake area should be supervised by a responsible adult.
8. Do not throw refuse, rubbish, or trash in the lakes.
9. Fishing is allowed only by permit issued by the State of California.
10. No fish cleaning in the lake areas.
11. Do not feed the waterfowl.
12. Pieces of wood or other floating objects should not be placed in the lake.
13. Rubber, plastic, or wood rafts are not allowed.

5.11 Safety

Every precaution is taken in the design and rehabilitation of the lake to make this project safe and enjoyable. Since safety is a prime consideration, a general discussion of water safety features is in order to establish the basic features of this water feature design. Accidental drowning prevention is, of course, the main objective.

Arbitrary depth restrictions in man-made (or natural) bodies of water are not generally effective in drowning prevention. Drownings can and do occur in very shallow depths of less than six (6) inches. Drownings generally occur when the victim is unable to cope with a given situation. The victim may stumble into a “hole” or drop off while wading. In most cases, the victim suddenly and unexpectedly finds himself in water over his head and panics. Drownings seldom occur when a potential victim gradually enters deeper water because natural instincts warn him that danger is present. For example, non-swimming children playing in the water at a “natural” beach will not venture into water much above their waistline. This instinctive action, coupled with good design in man-made bodies of water, should greatly decrease the accidental drowning potential.

The following minimum features should be used in all man-made lake and ponds to ensure maximum safety with good ecological control:

1. Swimming access should only be allowed in designated areas. No swimming, wading, full body contact activities should be permitted outside of the designated areas. There should be no large abrupt changes in water depth in areas with controlled access.
2. Designated swim areas should be posted, have lifeguards on duty during permitted swimming hours and should have a high contrast bottom that provides stable footing to allow better identification of potentially distressed persons needing assistance
3. Slopes should be controlled and gradual to ensure good footing for people in the water, in areas where entry to the lake can be anticipated. Underwater slopes should not exceed a slope of 4:1 (H:V).
4. All slope areas should be designed and constructed to prevent or restrict weed and insect growth with minimum turbidity problems.
5. Shoreline erosion and sinkholes should be repaired to preserve safe footfall area conditions

6. Circulation of water in the lake is a necessity to prevent dead spots that can become stagnant due to excessive buildup of contaminates. In Lake Gregory, the water is likely circulated sufficiently by wind action and temperature gradients.
7. Trash must be removed from the lake.

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Appendix A

Library Debris Basin Inspection Checklist and San Moritz Lodge Channel / Basin Inspection Checklist

Library Debris Basin Inspection Checklist

☐ Wet Season ☐ Dry Season ☐ Pre-Rain ☐ Post-Rain ☐ Other_____

Inspector:_____Date(s) of Inspection:_____Inspection Time:_

Instructions: *Complete checklist while surveying the basin. For action items, contact*_____

Weir Box, Low-Flow Orifices, Culvert(s)

What is the depth of accumulated sediment inside the weir box?		ft.
What is the average depth of accumulated sediment inside the culvert pipes?		ft.
Is the gravel gallery covering the Low-Flow Orifices in place?	Yes	No
Is there litter and debris in the weir box?	Yes	No

Notes:

1. If sediment in the culvert pipes and weir box is greater than 6 inches during the **off-season**, initiate maintenance procedures to remove sediment using hand methods or combine with sediment removal from the basin invert. During the recreational season, schedule sediment removal as early as possible at the onset of the off-season.
2. Remove all litter and debris in the weir box as early as possible, regardless of the season.
3. Clear the weir wall orifice openings and replace displaced gravel at the face of the orifices regardless of the season.
4. Record any damage to the weir box, low-flow outlet riser, and culvert pipe and entrance.

Record Observations: _____

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Debris Basin

Record the elevation of accumulated sediment shown on the staff gauge at the weir box?		ft.
Are there fallen or dead trees in the basin invert?	Yes	No
Is there vegetation undergrowth in the basin invert?	Yes	No
Is there debris and sediment clogging any of the basin inlet pipes?	Yes	No
Is there flotsam (branches and dead vegetation) and litter in the basin invert?	Yes	No
Is there damage to basin inlet pipes?	Yes	No

Notes:

1. If the elevation of accumulated sediment in the basin is one foot below the top of weir (Elev. 4528 ft.) during the **off-season** (October to March), initiate maintenance procedures to mobilize equipment for removal of sediment from the basin as early as possible. During the recreational season (April to September), schedule sediment removal as early as possible at the onset of the off-season.
2. Remove fallen or dead trees during sediment removal and/or annually at the onset of the off-season. If there is significant number of fallen or dead trees in the basin, remove them before the next storm event.
3. Remove significant vegetation undergrowth during sediment removal and/or annually at the onset of the off-season.
4. Record the level of sediment and/or debris clogging the basin inlet pipes.
5. Record any damage to basin inlet pipes.

Record Observations: _____

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☐ Wet Season ☐ Dry Season ☐ Pre-Rain ☐ Post-Rain ☐ Other_____

Inspector:_____Date(s) of Inspection:_____Inspection Time:_

Instructions: *Complete checklist while surveying the basin. For action items, contact*_____

Basins, Weirs, Inlet Pipes, Vegetated Side Slopes

What is the depth of accumulated sediment inside the basin?		ft.
What is the average depth of accumulated sediment inside the inlet pipes?		ft.
Are the rock rip-rap weirs visible and in-place	Yes	No
Is there litter and debris on the banks?	Yes	No

Notes:

1. If sediment in the inlet pipes is greater than 6 inches, initiate maintenance procedures to remove sediment using hand methods or combine with sediment removal from the basin invert. Schedule sediment removal as early as possible.
2. Remove all litter and debris from the banks as early as possible, regardless of the season.
3. When sediment in the basin reaches 1.0-ft in depth commence sediment removal operations as early as possible
4. Replace displaced rocks and re-establish weirs as early as possible after basin sediment removal operations.

Record Observations: _____

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Debris Basin

Record the elevation of accumulated sediment shown on the staff gauge at the weir box?		ft.
Are there fallen or dead trees in the basin invert?	Yes	No
Is there vegetation undergrowth in the basin invert?	Yes	No
Is there debris and sediment clogging any of the basin inlet pipes?	Yes	No
Is there flotsam (branches and dead vegetation) and litter in the basin invert?	Yes	No
Is there damage to basin inlet pipes?	Yes	No

Notes:

6. If the elevation of accumulated sediment in the basin is one foot below the top of weir (Elev. 4528 ft.) during the **off-season** (October to March), initiate maintenance procedures to mobilize equipment for removal of sediment from the basin as early as possible. During the recreational season (April to September), schedule sediment removal as early as possible at the onset of the off-season.
7. Remove fallen or dead trees during sediment removal and/or annually at the onset of the off-season. If there is significant number of fallen or dead trees in the basin, remove them before the next storm event.
8. Remove significant vegetation undergrowth during sediment removal and/or annually at the onset of the off-season.
9. Record the level of sediment and/or debris clogging the basin inlet pipes.
10. Record any damage to basin inlet pipes.

Record Observations: _____

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San Moritz Lodge Channel / Basin Inspection Checklist

☐ Wet Season ☐ Dry Season ☐ Pre-Rain ☐ Post-Rain ☐ Other_____

Inspector:_____Date(s) of Inspection:_____Inspection Time:_____
Instructions: *Complete checklist while surveying the basin. For action items, contact*_____

Debris Basin

Record the elevation of accumulated sediment shown on the staff gauge at the weir box?		ft.
Are there fallen or dead trees in the basin invert?	Yes	No
Is there vegetation undergrowth in the basin invert?	Yes	No
Is there debris and sediment clogging any of the basin inlet pipes?	Yes	No
Is there flotsam (branches and dead vegetation) and litter in the basin invert?	Yes	No
Is there damage to basin inlet pipes?	Yes	No

Notes:
1. If the elevation of accumulated sediment in the basin is one foot below the top of rip-rap weir between each channel reach during the **off-season** (October to March), initiate maintenance procedures to mobilize equipment for removal of sediment from the basin as early as possible. During the recreational season (April to September), schedule sediment removal as early as possible at the onset of the off-season.
2. Remove fallen or dead trees during sediment removal and/or annually at the onset of the off-season. If there is significant number of fallen or dead trees in the basin, remove them before the next storm event.
3. Remove significant vegetation undergrowth during sediment removal and/or annually at the onset of the off-season.
4. Record the level of sediment and/or debris clogging the basin inlet pipes.
5. Record any damage to basin inlet pipes.

Record Observations: _____

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☐ Wet Season ☐ Dry Season ☐ Pre-Rain ☐ Post-Rain ☐ Other_____

Inspector:_____Date(s) of Inspection:_____Inspection Time:_____
Instructions: *Complete checklist while surveying the basin. For action items, contact*_____

Basins, Weirs, Inlet Pipes, Vegetated Side Slopes

What is the depth of accumulated sediment inside the basin?		ft.
What is the depth of accumulated sediment inside the inlet pipes?		ft.
Are the rock rip-rap weirs visible and in-place	Yes	No
Is there litter and debris on the banks?	Yes	No

Notes:

6. If sediment in the inlet pipes is greater than 6 inches, initiate maintenance procedures to remove sediment using hand methods or combine with sediment removal from the basin invert. Schedule sediment removal as early as possible.
7. Remove all litter and debris from the banks as early as possible, regardless of the season.
8. When sediment in the basin reaches 1.0-ft in depth commence sediment removal operations as early as possible
9. Replace displaced rocks and re-establish weirs as early as possible after basin sediment removal operations.

Record Observations: _____

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Debris Basin

Record the elevation of accumulated sediment shown on the staff gauge at the weir box?		ft.
Are there fallen or dead trees in the basin invert?	Yes	No
Is there vegetation undergrowth in the basin invert?	Yes	No
Is there debris and sediment clogging any of the basin inlet pipes?	Yes	No
Is there flotsam (branches and dead vegetation) and litter in the basin invert?	Yes	No
Is there damage to basin inlet pipes?	Yes	No

Notes:

10. If the elevation of accumulated sediment in the basin is one foot below the top of weir (Elev. 4528 ft.) during the **off-season** (October to March), initiate maintenance procedures to mobilize equipment for removal of sediment from the basin as early as possible. During the recreational season (April to September), schedule sediment removal as early as possible at the onset of the off-season.
11. Remove fallen or dead trees during sediment removal and/or annually at the onset of the off-season. If there is significant number of fallen or dead trees in the basin, remove them before the next storm event.
12. Remove significant vegetation undergrowth during sediment removal and/or annually at the onset of the off-season.
13. Record the level of sediment and/or debris clogging the basin inlet pipes.
14. Record any damage to basin inlet pipes.

Record Observations: _____

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Appendix B

Lake Gregory Sediment Management Project
As-Built Plans

J. SMITH & T. MULI