Initial Study/MND

Remediation of Pesticides in Oso Flaco Creek

Prepared by the Coastal San Luis Resource Conservation District

for

State Water Resources Control Board

April 2021

SCH # 202104611

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A. Project Summary

1. Document Purpose + Organization

The purpose of this Initial Study is to provide a preliminary analysis of the proposed Remediation of pesticides in Oso Flaco Creek (the Project) to determine what type of environmental review will be required, and to allow for modification of the project to mitigate adverse impacts. This initial Study has been prepared by the Coastal San Luis Resource Conservation District (District).

2. Lead Agency

The CEQA Guidelines (14 CCR §15000 et seq.) establish the District as the lead agency. The lead agency is defined in CEQA Guidelines Section 15367 as "the public agency which has the principal responsibility for carrying out or approving a project." The lead agency decides whether an Environmental Impact Report (EIR) or Negative Declaration is required for the project and is responsible for preparing the appropriate environmental review document.

The contact person for the lead agency is:

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B. Project Description

1. Location and Environmental Setting

The Oso Flaco watershed is located in Southern San Luis Obispo County and flows into the Pacific Ocean. Flows from Oso Flaco Creek (the Creek) begin east of Highway 1, and flow west and north to Little Oso Flaco Lake, near the boundary of the Oceano Dunes State Parks Property. Below Little Oso Flaco Lake, the Creek flows west approximately one-third mile into Oso Flaco Lake. The Creek flows out of the lake and meanders approximately one-third mile before entering the Pacific Ocean. Little Oso Flaco Lake is approximately 16.4 acres in size, and Oso Flaco Lake is approximately 40 acres in size. The Oceano Dunes State Parks (State Parks) owns all of Oso Flaco Lake and nearly all of Little Oso Flaco Lake. The Creek runs through privately owned property.

The Project is located in the Oso Flaco watershed, a sub-watershed of the Santa Maria River watershed, approximately 19.5 square-miles (12,500 acres) in area. Primary land uses in the

watershed include intensive agriculture, primarily vegetable crops and strawberries, and open space used for recreation and habitat conservation. A small area of the upper watershed is suburban residential. An oil refinery is located in the dunes in the northwestern part of the watershed. Land use percentages are 66% agricultural and 34% other.

Figure 1. Oso Flaco Watershed

Oso Flaco Lake and Little Oso Flaco Lake (the Lakes) are formed over an abandoned channel of the Santa Maria River. Fine grain valley alluvium, which underlies the lakes and dunes, forms an aquiclude. Water in the lake is perched on top of the valley sediments. The lake is fed by groundwater and surface flows from the Creek. Nearly all the runoff in the watershed flows to Oso Flaco Lake via Little Oso Flaco Lake on its way to the Pacific Ocean.

2. Project Background and Purpose

The U.S. Environmental Protection Agency (EPA) lists the Lakes and Creek as impaired water bodies for organochlorine and organophosphate pesticides, Chlorpyrifos and DDTr specifically, and more recently Pyrethroids (referred to collectively as pesticides for the remainder of this document). The Total Maximum Daily Load for Toxicity and Pesticides in the Santa Maria Watershed (TMDL) was finalized on January 30, 2014. A 2017 sediment analysis completed by Padre Environmental found concentrations of the organochlorine pesticide DDT in Little Oso Flaco lake ranged from 210 to 780 ppb. This exceeds the State Board 303(d) fresh water sediment criteria for DDT (62.9 ppb). Little Oso Flaco Lake is also home to several special-status

(special concern, rare, threatened, or endangered at state and/or federal level) species that will be discussed in detail in this document.

Because the watershed is low-gradient, the Lakes rarely flush. As such, it is a sink for pollutants generated upstream. Pesticides bind with sediment particles and are transported into the Lakes, where they settle on the lakebed surface. Organochlorine and organophosphate pesticides were found in the top .5' of sediment and to a depth of 4.5' in Little Oso Flaco Lake (Padre, 2017). These pesticides are toxic to aquatic life and can bioaccumulate to levels that are harmful to humans and birds.

The proposed Project will remove sediment contaminated with pesticides from the Creek while concurrently implementing upstream sediment controls designed to capture and remove sediment before it enters the Creek. The results of the Project will be reduced pesticide concentrations in the Creek, improved water quality and enhanced habitat for fish and wildlife in the Oso Flaco watershed.

The framework for the Project was accomplished through the Oso Flaco Planning and Assessment project, completed in April 2019. A bathymetric survey and constraints and alternatives review were completed as part of the planning and assessment project that determined the best remediation course to pursue while considering budgetary, regulatory and feasible limitations. A remediation plan was developed, including 60% conceptual designs, permitting framework, implementation timeline and cost estimate. These components will inform and guide the objectives and scope of the Project.

The Project will help to attain the targets set in the TMDL for Toxicity and Pesticides for the Creek and is supported with funds from the State Water Resources Control Board (SWRCB) Non-Point Source 319(h) funds.

3. Project Characteristics

The proposed project includes the following components, as seen in figure 2:

1. On-farm sediment control Best Management Practices (BMPs)
2. Removal of sediment from the Creek upstream of Little Oso Flaco Lake
3. On-site remediation of sediment to thresholds protective of human and aquatic life

1. On-Farm sediment control BMPs in the upstream watershed

Pesticides continue to be mobilized via sediment deposition into the Creek from upstream sources. This not only degrades water quality and habitat in the creek, but also degrades the health and structure of the soil, and the viability of the adjacent agricultural operations. To reduce transport from the source, BMPs will be implemented on farms within the watershed. While BMPs will considerably reduce the amount of sediment mobilized from on-farm sources during storm flows, they are not designed to capture 100% of the sediment. BMPs will include a sediment basin and culvert improvements to prevent erosion. The sediment basin will be installed adjacent to the Creek, downstream of the road crossing that conveys the Creek under Oso Flaco Lake Road, on farmland owned by Teixeira Farms. The basin will divert a portion of flows via pumping, allow sediment to drop out of

suspension as flow passes through the basin, and finally discharge the flow back into the Creek adjacent to the pumping location to ensure no portion of the creek is deprived of flow. The basin will be constructed of native soil shaped into berms with access from the top of the berms for future sediment removal by excavator, with piping for inflows and outflows installed below grade. Teixeira Farms has agreed to maintain the structure for a minimum of 10 years, including periodic removal of sediment and vegetation. Three options are being considered for culvert improvements, all of which are intended to address erosion caused by the configuration of the culverts that convey the Creek under Oso Flaco Lake Road. In its current configuration, storm flows slow down at the culverts' inlet due to the significant entry angle, raising the water level to the point where flow crosses the road surface and runs over often-exposed farm fields, generating significant erosion. Additionally, the perched, unarmored condition of the culverts' outlets allows for substantial scour during storm events, generating further erosion. The first option to address the erosion is a realignment of the culverts carrying the creek to bring them in line with the Creek's natural flow path to maintain velocity and prevent erosive flooding. This option would involve trenching a new pathway for the creek underneath Oso Flaco Lake Road, temporarily dewatering the creek, installing a box culvert in the new alignment, installing headwalls at the culvert entrance, repaving the road over it, and filling in the now-unused portions of the roadside ditch. The second option is to re-align the creek on the upstream end of the culvert to maintain velocity entering the culvert, preventing the backup of water and subsequent erosion. This option would involve digging a new channel for the creek to follow, temporarily dewatering the creek, connecting the new channel to the existing channel, installing headwalls at the culvert inlet, installing outlet protection, and filling in the now-unused portions of the old creek channel. The third option is to install wingwalls at the existing culverts' entrance as well as outlet protection, to prevent localized erosion and somewhat improve the entrance conditions to prevent erosive flooding. This option would involve temporarily dewatering the creek, installing headwalls at the upstream end and outlet protection at the downstream end, as well as minor earthwork to conform the new features to existing grade. This BMP will be designed and installed in coordination with the County of San Luis Obispo Public Works department, however Teixeira Farms has agreed to maintain the outlet structure. Additional on-farm BMPs such as filter strips, riparian buffers, and irrigation management, may be identified during the course of the project. The Natural Resources Conservation Service (NRCS) will outreach to landowners in the watershed to provide additional technical assistance for BMPs beyond the scope of the Project. Demonstrations, workshops and presentations will be organized to engage landowners and facilitate BMP adoption and implementation.

2. Removal of sediment from Oso Flaco Creek

The proposed Project will remove approximately 13,000 cubic yards of sediment along a 1.2 mile stretch of the Creek using an excavator from the top-of-bank using a clam shell type of bucket that allows the majority of Creek water to remain in the channel (Appendix C). At the upstream end of the proposed creek sediment removal area, the Creek splits into two channels, one on the North side of the riparian corridor, and one on the South side. Proposed, temporary infrastructure would allow flow from the Creek to be diverted to

either channel independently during sediment removal, allowing the other channel to be dredged free of active flow and reducing impacts to water quality and aquatic life. Vegetation will be disturbed to the minimal extent possible and all exposed surfaces will be restored and revegetated after construction. Construction will occur between August 15 and November 30 to avoid impacts on sensitive species populations. Requisite permits and approvals will be secured prior to construction, and all avoidance and mitigation measures will be complied with.

3. On-site sediment remediation

Sediment removed from the creek will be placed in dump trucks and transported to the sediment remediation site, owned by Teixeira Farms. Prior to sediment removal activities, the remediation site will be outfitted with BMPs designed to prevent return water and sediment from flowing back into the creek. BMPs will be reviewed and approved by the engineer and regulatory agencies to ensure compliance with state water quality and federal jurisdictional requirements. Sediment will be unloaded from the trucks and land-applied, facilitating the drying process. Once the desired moisture level of the sediment is reached, the sediment will be incorporated into the existing topsoil. A carbon source such as biochar or green manure may be incorporated to catalyze the DDT breakdown process. The remediation area will be seeded with a cover crop to further aid in the DDT breakdown and to stabilize the surface. Cover cropping will also make the soil less bioavailable for wildlife during the remediation process, adequately reducing the risk of exposure of wildlife to DTT.

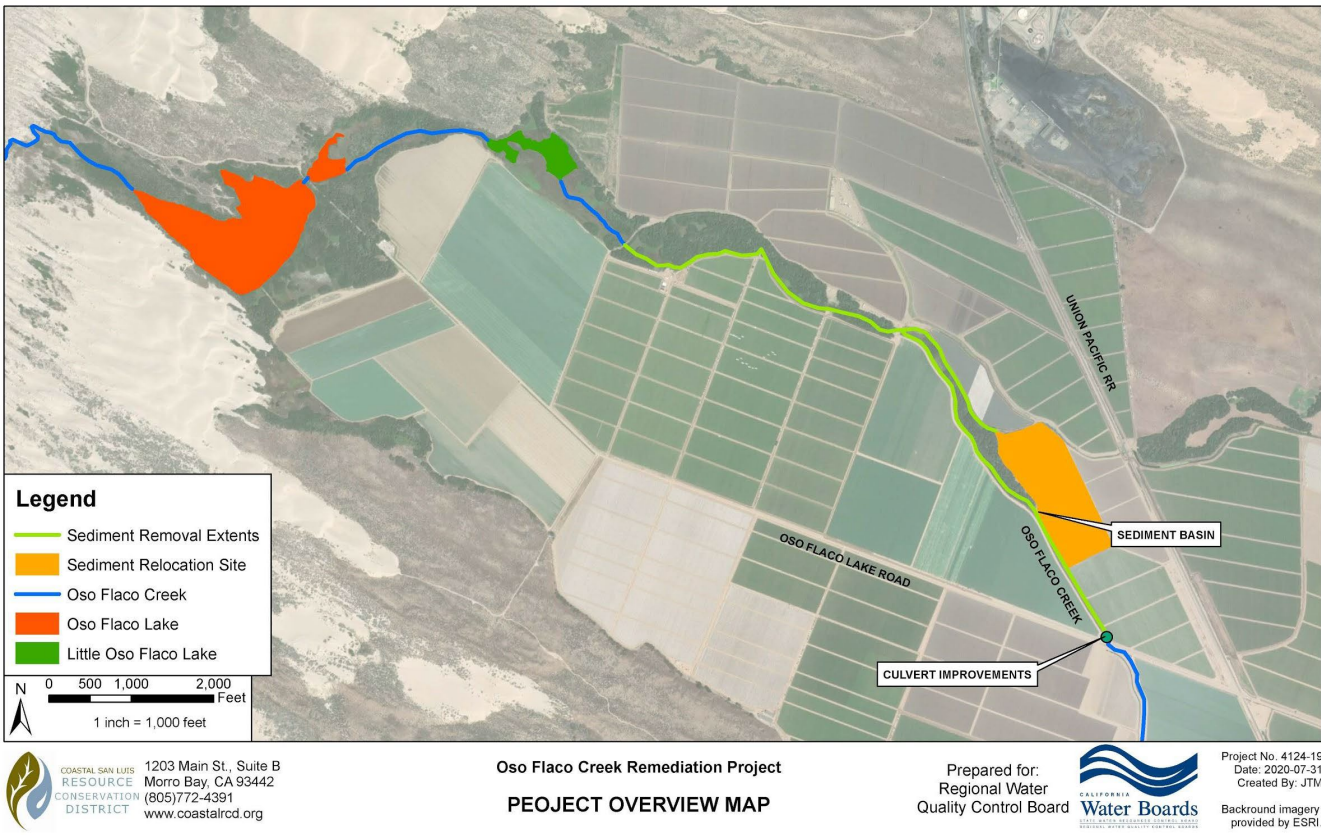


Figure 2. site map

4. Major Tasks

Major Tasks to be completed include finalizing 100% design plans, developing permit applications and securing permits, bidding and contracting process, implementation, remediation, on-going monitoring and post project reporting. These tasks apply to both the BMPs and sediment excavation however are not necessarily bundled together.

100% Design Plans

Conceptual designs were completed as a component of the Planning and Assessment project completed in 2019. 60% designs have been completed and are included as Appendix C. 100% designs will be completed as components of the Remediation of the current Project.

Conceptual designs include the locations and extent of sediment removal locations and the outline of upstream sediment capture plans. Conceptual design plans were based on sediment volumes projected from a bathymetric survey completed in Little Osos Flaco Lake in 2017 and assumes similar levels of DDT concentrations as were found sediment cores collected and analyzed in Little Oso Flaco Lake in 2017. A bathymetric

survey was completed for the project area in 2020, and 60% design plans were developed based on that survey. 60% designs will be used by the CSLRCD project manager to develop regulatory permit packages. 100% design plans will be completed by Spring 2022, and will include refined volumes of sediment removed, post-removal treatment, and stipulations for land application, based on regulatory feedback. Finalized plans for sediment capture will be developed, and sediment removal and capture components will be designed to minimize impacts to native habitats and water quality.

a) Environmental Review + Permitting

This document serves as the certified Mitigated Negative Declaration for this project. Permits packages will be developed based on 60% design plans and approvals will be secured by Spring 2022. Figure 3, under Required Permits and Approvals, is a list of anticipated regulatory permits. Regulatory representatives from each permitting agency consulted will have the opportunity to attend site visits and make recommendations on final treatment plans. No on-the- ground work will be completed until necessary permits are secured.

b) Bid Process

Contract specifications will be developed based on 100% project design plans. Contractors will be selected and contracts will be finalized. Final plans will be secured and a work schedule will be developed.

c) Implementation

Pre-construction surveys will be conducted prior to any ground breaking. Following surveys, the selected contractor will prepare the project site for construction, including the installation of flagging or fencing and precautionary BMPs. The contractor, District Engineer and Project Manager will coordinate through the duration of implementation, ensuring the project is built to specification and all permit conditions are met. A biological monitor will be present during all phases of implementation.

d) Remediation

Once sediment has been excavated and transported to the remediation site, the material will go through a remediation process, including dewatering and drying, land application, carbon source incorporation, stabilization and incorporation into topsoil. Once DDT levels in the sediment have been determined to be below acceptable thresholds, the remediation site may return to agricultural production.

e) Reporting and Monitoring

Monitoring reports will be sent to the requisite regulatory representatives and SWRCB Grant Manager. A robust monitoring plan has been developed for this project that includes monitoring water quality and habitat conditions during construction, DDT concentrations in sediment before construction and throughout the remediation process,

and regular water quality and sediment sampling to measure the efficacy of BMPs during the routine monitoring events conducted by the Department of Pesticide Regulation.

5. Related Projects

Numerous assessment and studies have quantified and analyzed conditions in the watershed, including:

- The Oso Flaco Planning and Assessment project, discussed in section I B, laid the foundation for the development of the Project.

- The Oso Flaco On-Farm Water Quality Implementation and Demonstration Project, completed in 2015, demonstrated multiple methods to slow and remove nutrients and sediment from the Oso Flaco watershed. The District effectively implemented vegetated treatment systems (VTS), sediment basins, nutrient management planning, as well as a woodchip bioreactor. The success of this project also demonstrates the ability of the District to implement practices in environmentally sensitive habitat and in coordination with regulatory and permitting agencies

- The Oso Flaco Creek Nonpoint Source Pollution Assessment (CSLRCD 2012) included monitoring of physical characteristics, nutrients, fecal coliform, pesticides, turbidity, and sediment load. This assessment recommends installation of appropriate best management practices (BMPs) to reduce sediment and nutrient loads in the watershed, further study of Little Oso Flaco Lake to determine its natural water treatment capacity, and further study of fish die-off occurrences in Oso Flaco Lake.

- The Nitrate and Sediment Assessment of Oso Flaco watershed (Cachuma RCD 2004) does not directly address persistent pesticides, though it does thoroughly address nutrient and sediment concerns in the watershed. Because pesticides are primarily absorbed by sediment, the recommendations for controlling sediment in the watershed are relevant to the pesticides concern.

- The California Department of Pesticide Regulation (CDRP) conducts routine monitoring of surface water in agricultural areas on the central coast. The compiled data is used to develop non-regulatory mitigation activities. CDPR will collect water and sediment samples from BMPs installed as part of this project and analyze them for a suite of pesticides. This information will help characterize the efficacy of the BMPs.

6. Required Permits and Approvals

Figure 3 lists the requisite permits and approvals for the Project:

Agency		Permit Type
State	Central Coast Regional Water Quality Control Board (CCRWQCB)	410 Water Quality Certification
	Ca Dept of Fish and Wildlife (CDFW)	Lake and Streambed Alteration Agreement 1600
	California Native American tribes	Consultation under AB 52 and Section 106
Federal	US Army Corps of Engineers (USACE)	Nationwide Permit 16: Return Water From Upland Disposal Areas
	US Fish and Wildlife Service (USFWS)	Section 7 Endangered Species Act Consultation
Local	County of San Luis Obispo	Minor Use Permit, Grading Permit
	Air Pollution Control Board	Air Quality Review

Figure 3. Regulatory Permits

7. Summary of Findings

The proposed activities involved in the Project would result in less than significant environmental effects to the resources listed in figure 4, however compliance with regulatory requirements and implementation of mitigation measures will reduce all significant adverse impacts to less than significant levels. Pursuant to Section 15070, the District has determined a Mitigated Negative Declaration is the appropriate environmental review document for the Project.

Resource	**Impacts**	**Mitigation**
Biological	Sensitive Species, Riparian Habitat, Wetlands	Avoidance of sensitive species, minimized traffic, bank revegetation, limited vegetation removal pre-construction surveys, consultation with jurisdictional agencies
Cultural	Pre-historic Resources, Historic Resources, Human remains	If deemed appropriate, approved archaeologists and Tribal representatives will monitoring during construction. Construction

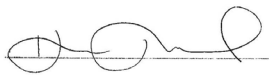
		will stop if any resources are discovered.
Geology and Soils	soil erosion or unstable soil conditions, change of surface runoff, Change the drainage patterns	Implementation of erosion control structures
Hydrology + Water Quality	Violate water quality standards, or alter the existing drainage pattern	Implementation of erosion control structures, limited vehicle + equipment uses
Mandatory Findings of Significance	Have the potential to degrade the quality of the environment, and/or have impacts that are individually limited, but cumulatively considerable	Consultation with jurisdictional agencies throughout project, on-site biologist, thorough pre-project impacts review with permitting agencies.

Figure 4. Resources less than significantly impacted with mitigation.

8. Summary Document Preparation

Pursuant to Section 21082.1 of CEQA, the District has independently reviewed and analyzed the Initial Study for the Project and finds that these documents reflect the independent judgment of the District. The District, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Mitigated Negative Declaration.

Neil Havlik
District Board President



Hallie Richard
Conservation Project Manager

9. Avoidance and Mitigation Measures

The following mitigation measures (figure 5) will be implemented by the District to avoid or minimize environmental impacts. Implementation of these mitigation measures would reduce the environmental impacts of the proposed project to a less-than-significant level.

California red-legged frog:

CRLF-1. Only Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

CRLF-2. Ground disturbance would not begin until written approval is received from the Service that project biologist(s) are qualified to conduct the work.

CRLF-3. A Service-approved biologist would survey the project site no more than 48 hours before the onset of work activities.

CRLF-4. Before any activities begin on a project, a Service-approved biologist would conduct a training session for all construction personnel.

CRLF-5. A Service-approved biologist would be present at the work site until all California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of habitat has been completed.

CRLF-6. If work must occur during the breeding season, the project proponent would implement the following measures as well:

a. No work would occur during or 24 hours after any rain event to minimize impacts to dispersing and breeding California red-legged frogs. A rain event is considered any precipitation resulting in 0.2" or greater of precipitation. A Service-approved biologist would survey the project site immediately before resuming project activities.

b. The project proponent would conduct project activities no earlier than 30 minutes after sunrise and no later than 30 minutes before sunset each day.

c. The project proponent would survey the project area daily before activities begin and monitor all project activities using a Service-approved biologist

CRLF-7. Unless approved by the Service, the project proponent would not impound water in the course of project activities in a manner that may attract California red-legged frogs.

CRLF-8. A Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs (Rana catesbeiana), signal and red swamp crayfish (Pacifastacus leniusculus; Procambarus clarkii), and centrarchid fishes from the project area, to the maximum extent possible. The Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.

CRLF-9. To ensure that diseases are not conveyed between work sites by the Service-approved biologist, the biologists would follow the fieldwork code of practice developed by the Declining Amphibian Populations Task Force at all times.

Gambel's watercress

GWC-1. A binder containing all avoidance and minimization measures, permits, and authorizations for the project will remain on site throughout construction. Prior to construction, all project staff, including contractors, will review all avoidance and minimization measures.

GWC-2. A qualified botanist will conduct a pre-construction survey to confirm absence of Gambel's watercress prior to commencing ground disturbance activities in the project area. If the plants are found during pre-construction surveys, including any Gambel's watercress hybrids, the botanist will flag the area and inform all workers of the need to stay out of the flagged area.

GWC-3. Prior to the onset of activities that could affect listed plant habitat, a qualified biologist will conduct a training session for all personnel. At a minimum, the training will include a description of relevant plants and its habitat and AMMs that should be implemented. The training session will be repeated for any new personnel.

California Least Tern (CLT)

CLT-1. A binder containing all avoidance and minimization measures, permits, and authorizations for the project will remain on site throughout construction. Prior to construction, all project staff, including contractors, will review all avoidance and minimization measures.

CLT-2. A training session for all construction personnel will be conducted by a qualified biologist prior to the start of project activities. At a minimum, the training will include a description of CLT and its habitat, the status of CLT, the general avoidance and minimization measures that are being implemented to protect the CLT as they relate to the project, and the boundaries within which project construction will be conducted.

CLT-3. If any activities are scheduled when CLT are known to be present (generally between April 15 and September 15) qualified biologists will continue to be on site during activities taking place at these locations. If CLT are not foraging nearby or biologists observing CLT foraging activity determines that CLT will not be disturbed by the activities, it may proceed as planned. However, if CLT are present and have the potential to be disturbed, the biologist will continue to direct activities to stop within 250 feet of the bird until it leaves on its own accord.

General Protection of Riparian, Aquatic and Wetland Habitats

Hab-1. Project proponents would re-vegetate project sites with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. The project proponent would use locally collected plant materials to the extent practicable.

Hab-2. If the project proponent or sponsoring agency determines the use of herbicides is necessary for their project, they would coordinate further with the Service to develop suitable avoidance and minimization measures for herbicide use for their project

Hab-3. Construction will occur between June 1 and November 30. Revegetation activities, including soil preparation, may extend beyond November 30, if necessary, to better ensure successful plant establishment during the onset of winter precipitation.

Hab-4. Debris, soil, silt, excessive bark, rubbish, creosote-treated wood, raw cement/ concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from projected related activities, shall be prevented from contaminating the soil and/or entering the waters of the State.

Hab-5. Where feasible, the construction shall occur from the bank, or on a temporary pad underlain with filter fabric. No mechanized equipment (e.g., internal combustion hand tools) will enter wetted
channels.

Hab-6. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires crossing a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle

Hab-7. The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).

Hab-9. Prior to use, clean all equipment to remove external oil, grease, dirt, or mud. Wash sites must be located in upland locations so wash water does not flow into the stream channel or adjacent wetlands.

Hab-10. All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation with 100 feet of the proposed watercourse crossings.

Hab-11. To minimize further disturbance to the work area, crew size will be limited, and number of vehicles and equipment to the maximum extent feasible.

Hab-12. Removal of any vegetation will be minimized to the extent feasible.

Hab-13. Depending on determinations made by the ACOE, compensatory mitigation will be completed at the requisite ratio to impacts.

Hab-14. No fill or dredge material will be placed within a designated wetland.

Sediment and Erosion Control Measures:

Sed-1. When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place.

Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input exists.

Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.

Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area.

Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.

Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.

Sed-7. All bare and/or disturbed slopes (larger than 10’ x 10’ of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.

Sed-8. Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.

Sed- 9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.

Cultural Resources:

CR-1. As necessary, the applicant shall retain a county-approved archaeologist to monitor ground disturbing construction activities. The applicant shall install any necessary protective field measures, as directed by the archaeologist, and shall keep them in good working order during construction. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity of the resource until such

time as the resources can be evaluated by an archaeologist and any other appropriate individuals.

CR-2. Pursuant to RGP78 and in accordance to 36 C.F.R section 800.13, in the event of any discovery during construction of human remains, archaeological deposits, or any other type of historic property, the project manager shall notify the USACE archaeological staff within 24 hours. Construction work shall be suspended immediately and shall not resume until USACE re-authorizes project construction

CR-3 If it becomes impossible to implement the project at a worksite without disturbing cultural or paleontological resources, then activity at that worksite shall be discontinued.

Figure 5. Avoidance and Mitigation Measures

II. Initial Study

A. Environmental Checklist + Responses

1. Summary

Project Title	Remediation of Pesticides in the Oso Flaco Watershed
Lead Agency	**Coastal San Luis Resource Conservation District**
Address	1203 Main Street, Ste B, Morro Bay CA 93433
Contact	Hallie Richard, (805)772-4391
Project Location	**Oso Flaco Creek**
Responsible Agency	**Central Coast Regional Water Quality Control Board**
Address	895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401
Contact	Peter Meertens (805) 801-4287
Existing Land Use	Agriculture
Project Description	Removal of sediment contaminated with pesticides from 1.2 miles of Oso Flaco Creek while concurrently implementing upstream sediment controls designed to capture and remove sediment before it enters the Creek.

Project Location	The project area is located on private agricultural land owned and managed by Teixeira Farms and is intensively farmed. The Project area is in the Oso Flaco Creek Watershed which contains Oso Flaco Creek and Little Oso Flaco Creek; both of which flow into Oso Flaco Lake. This is part of HUC 12, Santa Maria and located in the Oceano Quad. This watershed is dominated by intensive agricultural cultivation with some recreation at the Guadalupe- Nipomo Dunes and Oso Flaco Lake and an industrial refinery. An extensive wetland exists around Little Oso Flaco Lake.
Native American Tribes Affiliated with the Project Area?	The Northern Chumash Tribe, yak tityu tityu Northern Chumash Tribe, Salinan Tribe, Xolon tribe. Consultation has been initiated.
Public Agencies Whose Approval is Required	Permits and agreements are required from the US Army Corps of Engineers (USACE), the California Department of fish and Wildlife (CDFW), the Regional Water Quality Control Board (RWQCB), the US Fish and Wildlife Service (USFWS), and the County of San Luis Obispo (SLO Co.)

Figure 6. Project Information

2. Environmental Factors Potentially Affected

The environmental factors listed below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist below. A significant effect on the environment is defined in regulation as

> "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (14 CCR section 15382)."

Additionally, CEQA Section 15064 states that

> "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

☐	Aesthetics	☐	Mineral Resources
☐	Agriculture	☐	Noise
☐	Air Quality	☐	Population and Housing
X	Biological Resources	☐	Public Services
X	Cultural Resources	☐	Recreation
X	Geology and Soils	☐	Transportation/Traffic
☐	Hazards and Hazardous Materials	☐	Utilities
X	Hydrology + Water Quality	X	Mandatory Findings of Significance
☐	Land Use and Planning		

Figure 7. Initial Study Checklist

3. Determination

On the basis of this initial evaluation, the Environmental Coordinator finds that:

☐ The proposed project COULD NOT have a significant effect on the environment and the project qualifies for a categorical exemption.

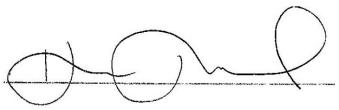
☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ 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 Date

Hallie Richard Coastal San Luis Resource Conservation District

Printed Name For

A. Analysis of Potential Environmental Impacts

1. Aesthetics

The project will have a low profile and will not be visible to the public because it will occur entirely below grade and is on private property. Oso Flaco Lake Road is not a designated scenic corridor. State Route 1, located east of the project site, is eligible but not officially designated as a State Scenic Highway. The area is not subject to County scenic protection standards.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Have a substantial adverse effect on a scenic vista?				X
Substantially damage scenic resources, including, but not limited to, trees, rock				X

outcroppings, and historic buildings within a state scenic highway?				
Substantially degrade the existing visual character or quality of the site and its surroundings?				X
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Conclusion

The project will occur entirely below grade level and on private property. The project will not be visible to the public; therefore, the project will have no impact on aesthetics. Implementation of this project will not affect scenic vistas or substantially damage scenic resources within a state scenic highway. This project will not substantially degrade the existing visual character or quality of the site or its surroundings, nor will it create a new source of light or glare. Implementation of this project will remove vegetation choking the Lake, thereby enhancing the visual character of the site. No mitigation measures will be required.

Reference

- California Department of Transportation (Caltrans). 2017. California Scenic Highway Mapping System. Officially Designated Scenic Highway Routes. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

2. Agriculture

The project area includes Prime Farmland, Unique Farmland, and Farmland of Statewide Importance according to the Department of Conservation California Important Farmland Finder. Intensive agricultural practices cause soils to erode into the Creek and Lake. This project will capture and remove this soil from the Creek, remediate it to acceptable levels of toxicity, and apply it on Prime and Unique farmland adjacent to the project area. On-Farm sediment control BMPs will be implemented to keep soil on farmland, preventing erosion and reducing soil loss. Reduced soil loss, as well as incorporating nutrient-rich sediment from the creek and lake bed into the topsoil, will improve the farmland by increasing soil health. 20 acres of farmland will be temporarily removed from production in order to expand access roads along the creek, and for the remediation site. No farmland will be permanently converted to non-agricultural use.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

Would the Project:				
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	
Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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
Result in the loss of forest land or conversion of forest land to non-forest use?				X
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

Conclusion

The Project will not convert Prime or Unique Farmland to nonagricultural uses. The project will temporarily remove 20 acres of farmland from production in order to expand access roads along the creek for sediment removal activities, and for the remediation site. No farmland will be permanently converted to non-agricultural use. Farmland used for remediation and access roads will return to agricultural production within 3 years.

The Project does not conflict with existing zoning for agricultural use, or a Williamson Act contract. Project activities are aligned with coastal zone agricultural uses, and the property is not under a Williamson Act contract. The project area does not include any forested areas and therefore will have no impacts on forestry resources nor conflict with existing zoning for, or

cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The project will enhance the soil health of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

References

- San Luis Obispo County. 2009. Coastal Zone Land Use Ordinance, Title 23 of the San Luis Obispo County Code. Revised January 2009.
- South County-Coastal Planning Area Rural Land Use Category Map. Department of Planning and Building. Revised October 23, 2007.

3. Air Quality

Air quality is a function of pollutant emissions and topographic and meteorological influences. The physical features and atmospheric conditions of a landscape interact to affect the movement and dispersion of pollutants and determine its air quality. The U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) are the federal and state agencies charged with maintaining air quality in the nation and state, respectively. The USEPA delegates much of its authority over air quality to CARB. CARB has geographically divided the state into 15 air basins for the purposes of managing air quality on a regional basis. The Project area lies within San Luis Obispo County in the South-Central Coast Air Basin (SCCAB). The SCCAB covers all of San Luis Obispo County, Santa Barbara County, and Ventura County. The San Luis Obispo County Air Pollution Control District (SLOAPCD) is the local agency charged with preserving air quality. In 2001, the SLOAPCD adopted its 2001 Clean Air Plan, which addresses ozone and particulate matter emissions, and identifies the control measures necessary to attain air quality standards.

San Luis Obispo County is in non-attainment status for ozone (O3), respirable particulate matter (PM10) and vinyl chloride under the California Air Resource Board (CARB) standards. The County is in attainment status for all other applicable CARB standards. Most recent exceedances of the state ozone standard in the last decade in the county have been measured at monitoring stations in Paso Robles or Atascadero.

The significance criteria established by the San Luis Obispo Air Pollution Control District (APCD) may be relied upon to make the following determinations. Specific mitigation measures will be implemented as applicable during project implementation.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Conflict with or obstruct implementation				X

of the applicable air quality plan?				
Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
Expose sensitive receptors to substantial pollutant concentrations?				X
Create objectionable odors affecting a substantial number of people?				X

Conclusion

The Project will have a less than significant impact on Air Quality. The project will impact approximately 100 acres for no longer than 90 days. Construction equipment will include an excavator, dump trucks, and scrapper. Emissions related to fugitive dust and engine combustion will be short-term. Access to the project site is by unimproved agricultural roads. Equipment will be staged in agricultural fields adjacent to the Creek and travel between .25 and .5 miles on unimproved agricultural roads. There are no residential homes near the project site. Standard erosion and dust control methods will be used as necessary. Based on this information, the Project will not exceed the 25lb of PM10 per day threshold.

Within San Luis Obispo County, the applicable air quality plan is the SLOAPCD's 2001 Clean Air Plan (Plan) (SLOAPCD 2001). The Plan addresses attainment and maintenance of state and federal ambient air quality standards (SLOAPCD 2001, page 1-1); however, the Plan "primarily addresses the [County's] ozone nonattainment problem" (SLOAPCD 2001, page 1-2). The proposed Project does not involve changes in land use or stationary sources that would emit substantial amounts of pollutants and would therefore not conflict with or obstruct implementation of the Plan.

Project emissions from vehicle trips and the use of heavy equipment are higher than those of normal farm operation. The intermittent and short-term temporary nature of these combustion emission sources would not cause or substantially contribute to a violation of an ozone or other air quality standard. Construction dust associated with grading and excavation activity for sediment removal and land application would be minimal.

As discussed above, the Project would not conflict with an applicable air quality plan nor cause or substantially contribute to an existing or projected air quality violation. Thus, the project would not result in a cumulatively considerable net increase in any pollutant for which the SCCAB does not attain ambient air quality standards (ozone and PM10).

Sensitive receptors are people or groups of people that have an increased sensitivity to air pollution or environmental contaminants. A sensitive receptor is generally defined as a location where human populations, especially children, seniors, and sick people, may be continuously exposed to air pollutants. These typically include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The project would occur at Oso Flaco Lake, which is more than one mile away from all sensitive receptors. Given the short duration of the project activities, it would not expose sensitive receptors to substantial pollutant concentrations.

Equipment operation, sediment disturbance, and vegetation removal inherent to the project has the potential to cause objectionable odors in the immediate project area. However, due to the isolated project location, the odors would not affect a substantial number of people. Project activities would not create off-site odors that would affect a substantial number of people.

References

- San Luis Obispo County Air Pollution Control District (SLOAPCD). 2001. Clean Air Plan San Luis Obispo County. San Luis Obispo County, CA. December 2001.
- 2012a. Strategic Action Plan 2013 - 2017. San Luis Obispo, CA. November 2012.
- 2012b. CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review. San Luis Obispo, CA. April 2012.

4. Biological Resources

a) Regulatory Setting

In addition to CEQA, other federal and state laws apply to the biological resources identified in this report. Each of these laws is identified and discussed below.

Federal Endangered Species Act (FESA) FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of the Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The USFWS and the National Marine Fisheries Service (NMFS) are charged with implementing and enforcing FESA. USFWS has authority over terrestrial and continental aquatic species, and NMFS has authority over species that spend all or part of their life cycle at sea, such as salmonids

Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." The USFWS's regulations define harm to

mean “an act which actually kills or injures wildlife.” Such an act “may include “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR § 17.3). Take can be permitted under FESA pursuant to sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

The Clean Water Act of 1972 (Section 404)

The United States does not have a federal, comprehensive law protecting wetlands. However, through the regulation of activities in “waters of the United States,” the Clean Water Act of 1972 is the main federal law used to protect wetlands. Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into “waters of the United States,” which includes traditional navigable waters, interstate waters, certain tributaries of any of these waters, and wetlands that meet these criteria or that are adjacent to any of these waters. In 1987, the USACE published a manual for the delineation wetlands, those that are regulated by Section 404, and generally defined wetlands as requiring the following three characteristics: hydrology, hydric soils, and hydrophytes (plants adapted to living in saturated soils).

The USACE also regulates activities in waters of the United States under the federal Rivers and Harbors Act. Section 10 of the Rivers and Harbors Act requires permits for any work or structures in navigable waters of the United States, including wetlands within or adjacent to these waters. Both dredging and filling are regulated activities under the Act. Navigable waters are defined as those waters that are subject to the ebb and flow of the tide, or that are presently, have been, or may be used for transport of interstate or foreign commerce.

The Migratory Bird Treaty Act of 1918 (MBTA)

Under the MBTA, it is unlawful to “pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not.” In short, under the MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird or destroying an egg. The USFWS oversees implementation of the MBTA.

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The Fish and Wildlife Commission is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in “take” of individuals (i.e., “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code, but CDFW has interpreted “take” to include the killing of a

member of a species which is the proximate result of habitat modification.

California Fish and Wildlife Code Section 1602
Section 1602 of the California Fish and Wildlife Code requires an entity to notify CDFG of any proposed activity that may 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 pavement where it may pass into any stream, river, or lake. CDFG uses the USFWS definition of wetlands when regulating these activities. The project would require Section 1602 authorization from CDFG.

Fish and Wildlife Code Section 3503, 3503.5, and 3505
Pursuant to Fish and Wildlife Code section 3503, it is unlawful to "take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Sections 3503.5 and 3505 provide similar protection specifically to raptors and their nests and to egrets, respectively. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW.

Species of Special Concern and Fish and Wildlife Code Fully Protected Species
CDFW maintains lists of animal Species of Special Concern (CSSC) that serve as "watch lists." A CSSC is not subject to the take prohibitions of CESA. The CSSC are species that are declining at a rate that could result in listing under FESA or CESA and/or have historically occurred in low numbers, and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals and is intended to focus attention on the species to help avert the need for costly listing under federal and state endangered species laws. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them.

Four sections of the Fish and Wildlife Code list 37 fully protected species (Fish and Game Code §§ 3511, 4700, 5050, and 5515). Fully protected species may generally not be taken or possessed except for scientific research. Incidental take of species that are designated as fully protected may be authorized via development of a natural community conservation plan (NCCP; Fish and Game Code § 2800 et seq.).

Environmental Setting

The plants and animals found on the Project site are representative of the Guadalupe-Nipomo Dunes, and are therefore considered part of the Dunes System. The Guadalupe-Nipomo Dunes is the largest remaining dune system south of San Francisco and the second largest in the state of California. It encompasses an 18-mile (29 km) stretch of coastline on the central coast of California and extends from southern San Luis Obispo County to northern Santa Barbara County. The Guadalupe-Nipomo Dunes system is home to a unique dunes ecosystem and is recognized as a National Natural Landmark.

The Project site consists of a large wetland extending from the base of drifting dunes to actively cultivated agricultural lands. It supports extensive emergent freshwater marsh habitats including California bulrush (Schoenoplectus californica) marsh, cattail (Typha latifolia) marsh, and duckweed (Lemna minor) blooms.

Special-Status Species

Special-status species are those plants and animals that are legally protected or otherwise recognized as vulnerable to habitat loss or population decline by federal, state, or local resource conservation agencies and organizations. In this analysis, special-status species include:

- Species that are state and/or federally listed or proposed for listing as threatened or endangered
- Species considered as candidates for listing as threatened or endangered
- CDFW Species of Special Concern
- Fully protected species per California Fish and Game Code, Plants considered by the California Native Plant Society (CNPS) and CDFW to be rare, threatened, or endangered [California rare plant ranked, (CRPR); e.g., CRPR 1B)

A list of those special-status species that have potential to occur in the project area is presented below.

California red-legged frog (Rana draytonii), federally threatened: Suitable habitat for California red-legged frogs is present in Oso Flaco Creek and presence of the species is presumed extant, however no protocol level surveys have been completed. Surveys were recently conducted for California red-legged frogs in accordance with the USFWS protocol in Little Oso Flaco Lake, upstream of the project area. Specifically, day and night eyeshine surveys were conducted on April 4, 2017 and day and night eyeshine surveys were conducted on April 16, 2017. No California red-legged frogs were observed during these surveys.

Gambel's watercress (Nasturtium gambelii), federally endangered: Gambel's watercress is present downstream in Oso Flaco Lake, however no protocol level surveys have been conducted in the project area.

Marsh sandwort (Arenaria paludicola): Marsh sandwort is present downstream in Oso Flaco Lake; however, no protocol level surveys have been conducted in the project area.

California least tern (Sterna antillarum browni), federally endangered: California least tern is known to forage at Oso Flaco Lake, downstream of the project site, but does not arrive in the area until early April.

Tidewater goby (Eucyclogobius newberryi), federally endangered: A Tidewater goby survey identified the first known collection of this species in the watershed in Oso Flaco Creek

Lagoon, between the dunes and beach, in March of 2017 though not in or around the project site. Subsequent collection surveys were unsuccessful.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the 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 Game or U.S. Fish and Wildlife Service?		X		
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 Game or U.S. Fish and Wildlife Service?		X		
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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	
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	

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

Conclusion

The Project will have less than significant impacts on Biological Resources with mitigation. The Project is designed to mitigate and avoid impact 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 Game or U.S. Fish and Wildlife Service, including the interference of any native resident or migratory fish or wildlife species.

No surveys for California red-legged frogs have been conducted in the Project area, however the species is presumed extant. Additionally, the project includes avoidance and minimization measures that would ensure that impacts to red-legged frogs would be mitigated (see Appendix B). The measures include the requirement that USFWS-approved biological monitors perform pre-construction surveys for California red-legged frog to ensure no California red-legged frogs enter the work area; they must be present during dewatering and re-watering. Thus, no impacts to California red-legged frog are expected to occur during project activities.

Surveys conducted by California State Parks for Gambel's watercress and Marsh sandwort identified individuals adjacent to the downstream extent of the project area, however the survey did not continue past that extent. The Project includes avoidance and minimization measures that would ensure impacts to listed plant species would not be significant with mitigation.

The project includes avoidance and minimization measures that would ensure that the California least tern would not be harmed by project activities.

Tidewater goby have not been identified in the project area; however previous surveys identified an individual downstream in the Oso Flaco Lake lagoon. The project includes avoidance and minimization measures that would ensure that Tidewater goby would not be harmed by project activities.

The Project will have a less than significant impact on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service or wetlands as defined by Section 404 of the Clean Water Act. Project activities will take place from the Creek bank. No wetlands or other waters of the U.S. would be permanently lost; temporary impacts would occur during sediment removal activities and all impacts will be mitigated for in the avoidance and mitigation measures (AMM). AMM include avoiding wetlands to the maximum extent feasible, regulating equipment use in wetland areas, limiting vegetation removal to the minimum extent possible, not placing any fill or dredged material in wetlands, and implementing compensatory mitigation on site where required by jurisdictional agencies.

The Project footprint is approximately .2 square miles, or 115 acres, and includes waters of the US, which subject the project to US Army Corps of Engineers (USACE) jurisdiction. Nationwide permit will be secured for the project. The project will also require a lake and streambed alteration agreement from the California Department of Fish and Wildlife (CDFW), and a State Water Resource Control Board 401 Water Quality Certification. All USACE, SWRCB and CDFW permit/agreement requirements would be implemented before, during and after project construction. Additionally, the project includes avoidance and minimization measures that would ensure that sediment control measures are implemented to prevent sediment transport downstream of the project site.

Vegetation removal will comply with title 23 of the Coastal Zone land use ordinance for tree removal. A Habitat Conservation Plan (HCP) is currently being developed; however, it has not been approved by the trustee agencies. This project would be consistent with activities anticipated by the HCP.

References

- California Natural Diversity Database. https://map.dfg.ca.gov/bios/?tool=cnddbQuick

-California Natural Diversity Database. Biogeographic Data Branch. California Department of Fish and Game. 2017.

- California Department of Parks and Recreation (CDPR). 2016. 2016 Nesting Season Management Plan to Avoid Take of the California Least Tern and Western Snowy Plover at Oceano Dunes State Vehicular Recreation Area, San Luis Obispo County, California. February 2017.

- Nesting of the California Least Tern and Snowy Plover at Oceano Dunes State Vehicular Recreation Area, San Luis Obispo County, California, 2015 Season, Oceano Dunes District, CDPR, Off-Highway Motor Vehicle Division. Prepared for California Department of Fish and Game and U.S. Fish and Wildlife Service.

5. Cultural Resources

The project area is located within a historically agricultural area, cultivated and grazed since the Rancho era of the 1830's. No built structures exist in the project area. Because Federal permits are required for the Project, a section 106 Cultural Resources review will be completed as part of the NEPA compliance process.

An archaeological study of the project area conducted in March 2021 by the County of San Luis Obispo and consistent with CEQA guidelines, determined that no significant cultural resources exist within the project area. The study included a pedestrian survey and records search of the Central Coast Information Center of the California Historical Resources Information System. Background research revealed that several cultural resource studies have occurred within .25

miles of the project area and that no archaeological sites have been recorded within or adjacent to the Project area.

The study recommends that a pre-construction archeological briefing is provided to all crew members working on the project, and that a qualified archaeologist and member of the local Native American community monitor initial ground disturbing activities along the creek bank, (i.e., grading/blading and not backfilling or work within previously monitored soils), or until the qualified archaeologist determines that monitoring is no longer necessary.

CSLRCD sent notification letters to each of the Native American Tribal representatives listed under the National American Heritage Commission, notifying them of the project. In response to the outreach, the Salinan Tribe of Monterey and San Luis Obispo Counties responded requesting that a tribal monitor be present during ground disturbing activities.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Disturb pre-historic resources?		X		
Disturb historic resources?			X	
Disturb paleontological resources?				X
Disturb any human remains, including those interred outside of formal cemeteries?		X		

Conclusion

The Project will have less than significant impacts on Cultural Resources with mitigation. The Project will have less than significant impact to prehistoric or historic resources or human remains with mitigation. Based on the archaeological study referenced above, it is unlikely that cultural resources will be discovered during project implementation activities. Pursuant to AB 52, and in response to comments received as a result of outreach to local Native American tribal representatives, a Tribal Representative may be present during ground disturbing activities. The following mitigation measures will be enacted to avoid impacts to cultural resources:

Cultural Resources:

CR-1. As necessary, the applicant shall retain a county-approved archaeologist to monitor ground disturbing construction activities. The applicant shall install any necessary protective field measures, as directed by the archaeologist, and shall keep them in good working order during construction. If any significant archaeological resources or human remains are found during monitoring, work shall stop within the immediate vicinity of the resource until such time as the resources can be evaluated by an archaeologist and any other appropriate individuals.

CR-2. Pursuant to RGP78 and in accordance to 36 C.F.R section 800.13, in the event of any discovery during construction of human remains, archaeological deposits, or any other type of historic property, the project manager shall notify the USACS archaeological staff within 24 hours. Construction work shall be suspended immediately and shall not resume until USACE re-authorizes project construction

CR-3 If it becomes impossible to implement the project at a worksite without disturbing cultural or paleontological resources, then activity at that worksite shall be discontinued.

No paleontological resources are anticipated to be found in the Project site. There has been no documentation of unique paleontological resources or geological features in the project area.

References

- https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466
- http://ohp.parks.ca.gov/ListedResources/?view=name&criteria
- Nocerino, E (et all), 2014. Phase 1 Archaeological Study for the Oso Flaco On-Farm Water Quality Implementation and Demonstration Project, San Luis Obispo County, California

6. Geology and Soils

The project area is located in the Oso Flaco watershed, a sub-watershed of the Santa Maria Watershed. The Santa Maria watershed lies at the boundary of two geomorphic regions – the Coast Ranges and the Transverse Ranges – both highly influenced by right-lateral movement along the San Andreas Fault Zone. The lithology of the watershed is characterized as young, weakly consolidated marine and some non-marine sedimentary rocks composing the valley bottoms. The Santa Maria valley is a principal depositional basin in the watershed and supports the watershed's two main groundwater basins. It has been estimated that each basin has a maximum thickness of sediments reaching 2.0 and 2.9 km, respectively that has been filling continuously over the past 4 million years.

According to the USDA soil survey data, th**e** project area consists of primarily wet psamments and fluvents located in the creek channel, characterized by 0-5% slopes, originating from alluvium. The natural drainage rating is considered very poor, and ponding is infrequent. THe soils meet hydric criteria, and the USFWS wetland mapper considered this area a freshwater

forested wetland . The farmland adjacent to the Lake and Creek is comprised of Camarillo Loam and Corralito's Sandy Loam, characterized by alluvial fans and floodplains, and part of the R014XD025CA coarse loamy flat ecological site.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?				X
Be within a CA Dept. of Mines & Geology Earthquake Fault Zone (formerly Alquist Priolo)?				X
Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation or fill?		X		
Change rates of soil absorption, or amount or direction of surface runoff?		X		
Include structures located on expansive soils?				X
Change the drainage patterns where substantial on-or off-site sedimentation/ erosion or flooding may occur?		X		

Conclusion

The Project will have less than significant impacts on soil erosion and drainage with mitigation. Implementation of this project will not expose people or structures to potential substantial adverse effects due to landslides or earthquakes and is not located within a CA Dept. of Mines & Geology Earthquake Fault Zone.

This project includes the implementation of erosion control structures to prevent soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation or fill, rates of soil absorption, or amount or direction of surface runoff. Sediment removal from the Creek will prevent future flooding on adjacent farmland. The project area is on stable soils that will not become unstable, slide laterally, subside, liquify, collapse or expand. No structural components are included in the scope of this project. The following mitigation measures will be implemented to prevent erosion, flooding, and impacts to water quality

Sediment and Erosion Control Measures:

Sed-1. When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place.

Sed -2. Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of the project site within the riparian area. The devices shall be properly installed at all locations where the likelihood of sediment input exists.

Sed-3. Sediment shall be removed from sediment controls once it has reached one-third of the exposed height of the control. Whenever straw bales are used, they shall be staked and dug into the ground to a minimum depth of 12 cm, and only sterile, weed-free straw shall be utilized. Catch basins shall be maintained so that no more than 15 cm of sediment depth accumulates within traps or sumps.

Sed-4. Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area.

Sed-5. The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.

Sed-6. Immediately after project completion and before the close of the seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain
reptiles and amphibians.

Sed-7. All bare and/or disturbed slopes (larger than 10’ x 10’ of bare mineral soil) will be treated with erosion control measures such as straw mulching, netting, fiber rolls, and hydroseed as permanent erosion control measures.

Sed-8. Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.

Sed- 9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals.

References

- USDA Web Soil Survey, http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
- SLO Watershed Project: Santa Maria River Watershed, http://www.slowatershedproject.org/reports/snapshots/Snapshot-South-County-Santa-Maria-River-Watershed.pdf
- https://maps.conservation.ca.gov/cgs/EQZApp/app/

7. Hazards and Hazardous Materials

The Project will remove sediment that contains pesticides from Oso Flaco Creek and relocate it to adjacent farmland for beneficial reuse. Sediment assessment was performed by Padre Associates Inc in 2017 that analyzed sediment core samples from Little Oso Flaco lake (adjacent upstream of the project area) for organochlorine pesticides. In the report of findings (Attachment 3) Padre concluded that the sediment samples analyzed do not exceed the California hazardous waste threshold of one mg/kg (wet weight) for DDD, DDE, or DDT (Title 22, California Code of Regulations Section 66261.24 et seq.). Based on similar conditions and sediment depositional modeling, it is anticipated that similar concentrations exist within the project area. Additional chemical analysis indicates, according to the Padre report, that Mercury, selenium, TPH, oil and grease, nitrate, nitrite, and fecal coliform bacteria results are not anticipated to result in additional use or disposal restrictions for dredged material.

DDTr, an organochlorine pesticide of particular concern in the watershed, is a legacy pesticide last used in the area in 1974. DDTr is a sediment bound particle and will not become water soluble during rain or irrigation events. DDTr is not taken up by crops and does not pose a risk for food safety. Sediment will be removed from the Creek and allowed to dry before being tilled into farm soil. Soil erosion prevention practices, such as cover cropping and filter strips, will be implemented to ensure that sediment does not re-enter the water course.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				

Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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
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
For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Conclusion

The Project will have no impacts regarding hazardous materials. Sediment that will be removed from Oso Flaco Creek does not exceed the Title 22 criteria for toxicity threshold for DDT or its metabolites of 1 mg/kg (wet weight), therefore the material is not considered to be hazardous waste. The project will not create a significant hazard to the public or the

environment through the routine transport, use, disposal of hazardous materials, or the upset and accident conditions involving the release of hazardous materials into the environment. The Project area is not located near an existing or planned school, public or private air strip. Implementation of this project will not impair the implementation or adoption of an emergency response or emergency action plan. This project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires.

References

- California Code of Regulations, Title 22 § 66261.24. Characteristic of Toxicity
- Report of Findings Oso Flaco Lake and Little Oso Flaco Lake Sediment Assessment Activities, Padre Associates Inc, 2017
- https://www.sloairport.com/airport-land-use-commission-aluc/
- https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Oso+Flaco+

8. Hydrology + Water Quality

The Project will remove sediment from Oso Flaco Creek and relocate it to an adjacent farm field for remediation and beneficial reuse as top soil. Sediment will be dewatered and allowed to dry then incorporated into the topsoil. A cover crop will be planted for a growing season to stabilize the field. Sediment control structures will be in place prior to the start of construction and until construction is complete to ensure that water quality is impacted as little as possible as a result of this project. A designated individual will be responsible for assessing the structures daily. A SWRCB 401 Water Quality Certification will be secured for the work, and all mitigation and avoidance measures will be complied with. On-Farm sediment control BMPs, upstream of the sediment removal activities, will be subject to similar restrictions and oversight. BMPs will not be installed in or adjacent to waterways. Sediment removed from BMPs will not be stockpiled or located near waterways. BMPS will be maintained in such a way that they will not degrade water quality.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Violate any water quality standards or waste discharge requirements?		X		
Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level				X

which would not support existing land uses or planned uses for which permits have been granted)?				
Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?		X		
Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
Otherwise substantially degrade water quality?				X
Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
Inundation by seiche, tsunami, or mudflow?				X

Conclusion

The Project will have less than significant impacts on water quality with mitigation. By implementing the mitigation measures listed below, implementing the approved monitoring plan associated with this project, and installing sediment control structures, the Project will not violate water quality standards or waste discharge requirements, nor will it substantially alter the existing drainage pattern of the site or area.

General Protection of Riparian, Aquatic and Wetland Habitats

Hab-1. Project proponents would re-vegetate project sites with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. The project proponent would use locally collected plant materials to the extent practicable.

Hab-2. If the project proponent or sponsoring agency determines the use of herbicides is necessary for their project, they would coordinate further with the Service to develop suitable avoidance and minimization measures for herbicide use for their project

Hab-3. Construction will occur between June 1 and November 30. Revegetation activities, including soil preparation, may extend beyond November 30, if necessary, to better ensure successful plant establishment during the onset of winter precipitation.

Hab-4. Debris, soil, silt, excessive bark, rubbish, creosote-treated wood, raw cement/ concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from projected related activities, shall be prevented from contaminating the soil and/or entering the waters of the State.

Hab-5. Where feasible, the construction shall occur from the bank, or on a temporary pad underlain with filter fabric. No mechanized equipment (e.g., internal combustion hand tools) will enter wetted
channels.

Hab-6. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires crossing a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle

Hab-7. The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).

Hab-9. Prior to use, clean all equipment to remove external oil, grease, dirt, or mud. Wash sites must be located in upland locations so wash water does not flow into the stream channel or adjacent wetlands.

Hab-10. All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation with 100 feet of the proposed watercourse crossings.

Hab-11. To minimize further disturbance to the work area, crew size will be limited, and number of vehicles and equipment to the maximum extent feasible.

Hab-12. Removal of any vegetation will be minimized to the extent feasible.

Hab-13. Depending on determinations made by the ACOE, compensatory mitigation will be completed at the requisite ratio to impacts.

Hab-14. No fill or dredge material will be placed within a designated wetland.

The Project addresses only surface flows in the Creek and will not impact groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. No storm drain infrastructure exists in the project sites; therefore, the Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Project does not impact housing and will not expose people or structures to a significant risk of loss, injury or death. The Project will not obstruct flood waters or high flows. The Project will not implement levees or dams, or otherwise increase risk of Inundation by seiche, tsunami, or mudflow.

References

- SLO County FEMA Flood Zone designation: https://opendata.slocounty.ca.gov/datasets/cd20f41a5d534153b50aa3975f1bfc27_65

9. Land Use and Planning

The Project is located in an area zoned for agriculture and recreation and will not alter that land use. The Project site is under the jurisdiction of several land use agencies that require permits, authorizations or certifications including the USACE (Nationwide Permit), the RWQCB (404 Certification), San Luis Obispo County (Coastal Development Permit), and CDFW (Streambed Alteration Agreement).

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Physically divide an established community?				X
Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
Conflict with any applicable habitat				X

conservation plan or natural community conservation plan?				

Conclusion

The Project will have no impact on Land Use and Planning. The Project is not in or near a community, therefore it will not physically divide an established community. The project does not conflict with plans or policies adopted for the purpose of avoiding or mitigating an environmental effect. Permits will be secured for the Project to ensure compliance with the Local Coastal Plan. A Habitat Conservation Plan (HCP) is currently being developed; however, it has not been approved by the trustee agencies. This project would be consistent with activities anticipated by the HCP.

References

- California Coastal Commission (CCC). Coastal Development Permit Amendment 4-82-300-A5, issued May 2001.
- San Luis Obispo County. 2009. Coastal Zone Land Use Ordinance, Title 23 of the San Luis Obispo County Code. Revised January 2009.

10. Mineral Resources

The project will maintain the agricultural use of the land.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
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
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

Conclusion

The Project will have no impact on Mineral resources. No locally important mineral resources are designated at this site in the San Luis Obispo County General Plan. The Project would not affect any known mineral resources of regional or local importance.

11. Noise

The County's Land Use Ordinance identifies maximum exterior noise standards as between 45 – 70 db. Noise sources associated with agricultural land uses as listed in Section 22.06.030. Noise produced by the project will be related to equipment and are similar to other existing noise sources for agricultural land use.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project Result in:				
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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 expose people residing or working in the project area to excessive noise levels?				X
For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

<u>Conclusion</u>

Noise generated by the project will have less than significant impacts. Noise levels and ground borne noise levels will not be generated in excess of standards established in the local general plan or noise ordinance. Temporary or periodic increase in ambient noise levels in the project vicinity will be limited to avoid impacts to nesting and mating bird seasons. All field crew will have appropriate ear protection. The Project is not located within the vicinity of an airport land use plan.

Resources

- County of San Luis Obispo South County Coastal Plan

12. Population and Housing

The Project is agricultural and does not include a housing component. The Project site is located 7 miles north of the community of Guadalupe and approximately 3 miles west of a newly developed subdivision. The Oceano Dunes State Vehicle Recreation Area is located southwest of the Project site. The park offers overnight camping on the beach south of Marker Post 2. The Oso Flaco Lake area is only open during daytime hours with no camping.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project Result in:				
Induce substantial 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
Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Conclusion

The Project will have no impact on Housing or Populations. This project will not significantly impact populations or housing. The project will not induce substantial population growth, displace substantial numbers of existing housing, or displace substantial numbers of people.

Resources

- County of San Luis Obispo South County Coastal Plan

13. Public Services

Implementation of this project will not substantially impact any government facilities or require the expansion of government services.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project Result in:				
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, Parks, or Other public facilities?				X

Conclusion

The Project will have no impact on public services. Implementation of this project will not substantially impact any government facilities or require the expansion of government services.

14. Recreation

The project is agricultural and does not include a recreation component.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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

Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Conclusion

The Project has no impact on recreation. The Project will have no nexus with the adjacent Oceano Dunes SVRA, and will have no impact on other regional parks. The Project scope does not include construction or expansion of recreational facilities.

15. Transportation/Traffic

The project is agricultural and will not increase traffic. It is located near the end of Oso Flaco Creek Road where it dead ends into Oso Flaco Lake. Traffic in this area is related to recreational access to the Lake and agricultural production.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	

Result in inadequate emergency access?				X
Result in inadequate parking capacity?				X
Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

Conclusion

The Project will have less than significant impact on transportation. Motor vehicle activity associated with the sediment removal portion of the Project will occur on interior farm road and staging areas, with the exception of the initial mobilization and demobilization of equipment. Culvert improvements will temporarily impact traffic and access, but will be constructed in such a way as to minimize delays. The Project will not increase traffic, exceed a level of service standard established by the county, change in air traffic patterns, impact emergency access or parking. No plans for alternative transportation are in place in the area.

16. Utilities and Service Systems

The Project will not constrict or expand public utilities or services.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X

Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
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
Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
Comply with federal, state, and local statutes and regulations related to solid waste?				x

Conclusion

The Project will have no impact on utilities and service systems. The project does not involve use of or changes to water or wastewater utilities. No water uses are proposed that would exceed wastewater treatment requirements. The project would not require construction of new or expanded water or wastewater treatment facilities. This project would not affect storm water drainage or facilities. No new water supplies or entitlements would be needed; there would be no expansion of existing water use associated with this project. The project would not result in new housing or businesses that would require permanent year-round garbage collection. Waste associated with project construction would be collected and disposed of properly by contractors. All waste collection and disposal would occur compliance with all federal, state, and local laws and statutes.

Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
Have the potential to 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,		X		

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?				
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		
Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

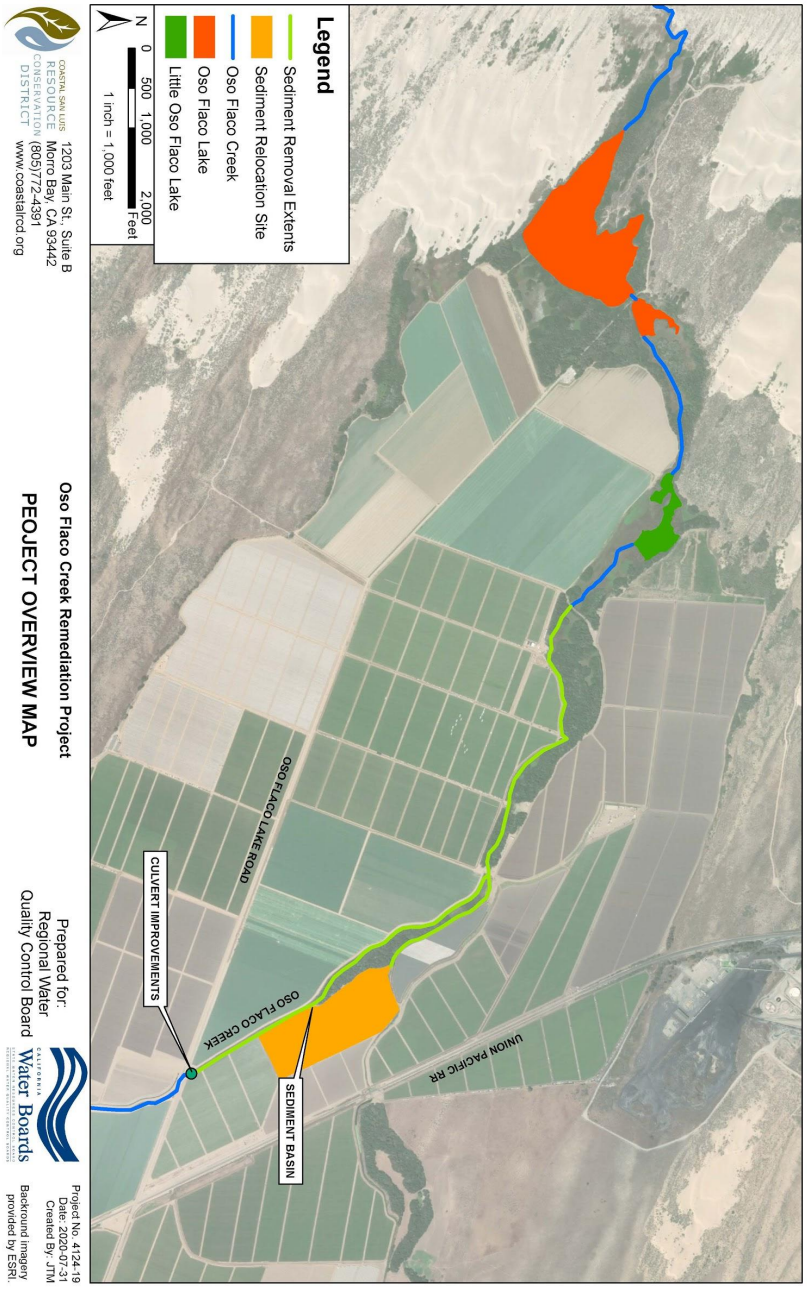
Conclusion

The Project includes many avoidance and minimization measures that are listed in Section I of this document. These measures are in pace to ensure that the Project will minimize and avoid the substantial degradation of the quality of the environment, significantly impact fish or wildlife species or their habitat, adversely affect plant or animal communities, or affect historic or other cultural resources. Avoidance and mitigation measures are also in place to limit cumulatively considerable impacts associated with construction and post construction. The proposed project would be very short-term in duration. The project would not have environmental effects that would cause substantial adverse effects on humans, either directly or indirectly.

III. Appendices

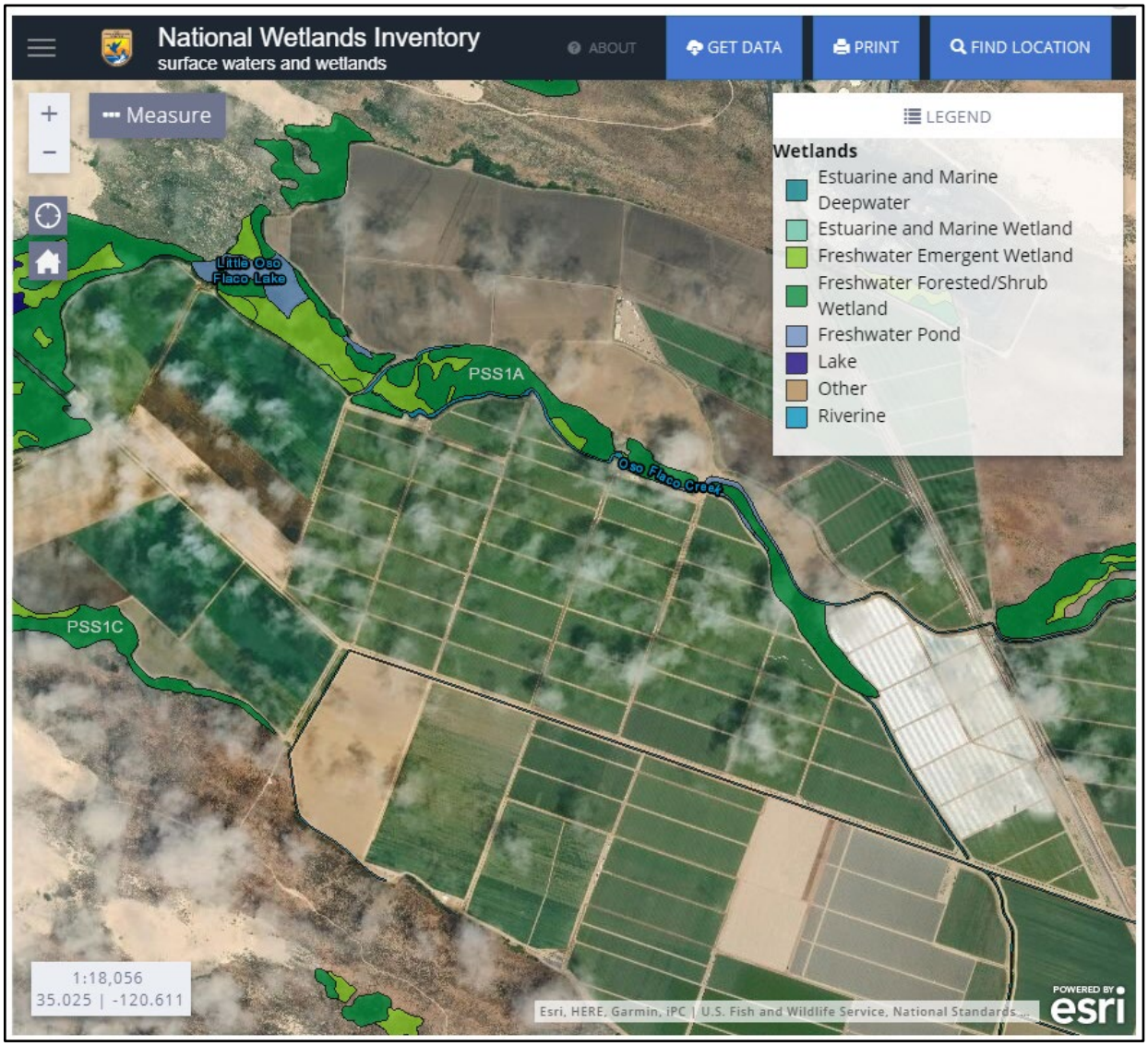
A. Appendix A: Project Maps + Photos

1. Vicinity Map



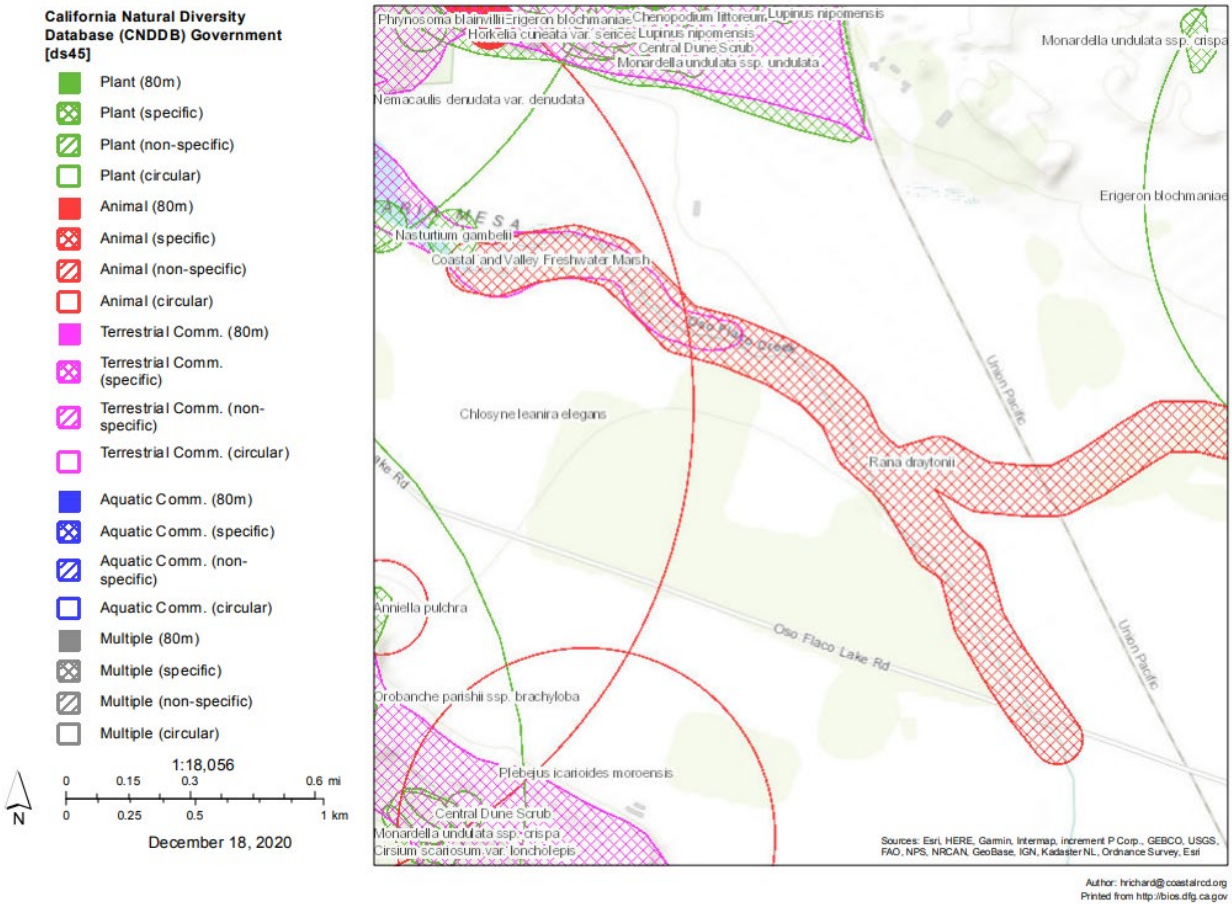
Appendix A: Project Maps + Photos

2. Wetland Mapper



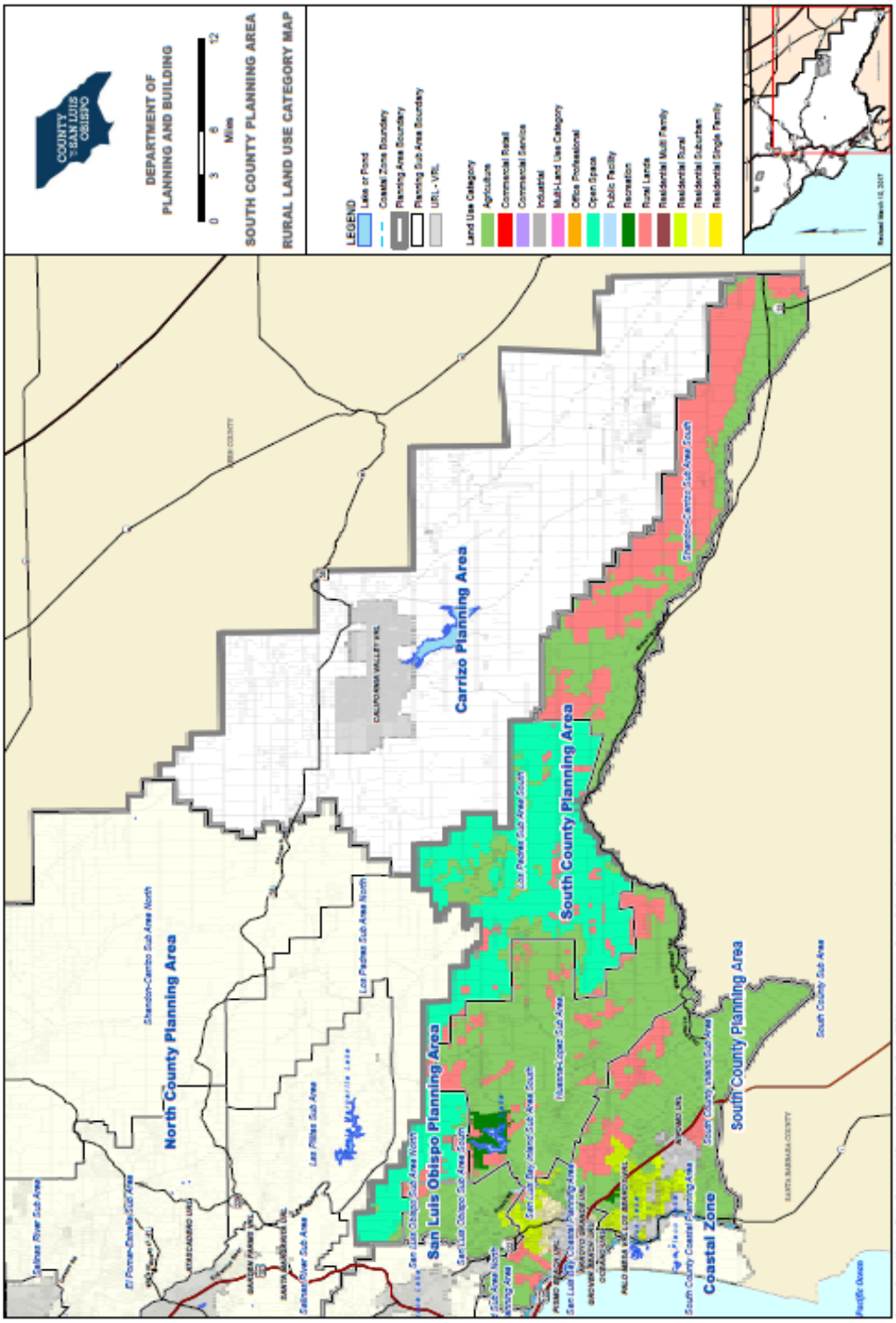
Appendix A: Project Maps + Photos

3. CNDDB species list and map



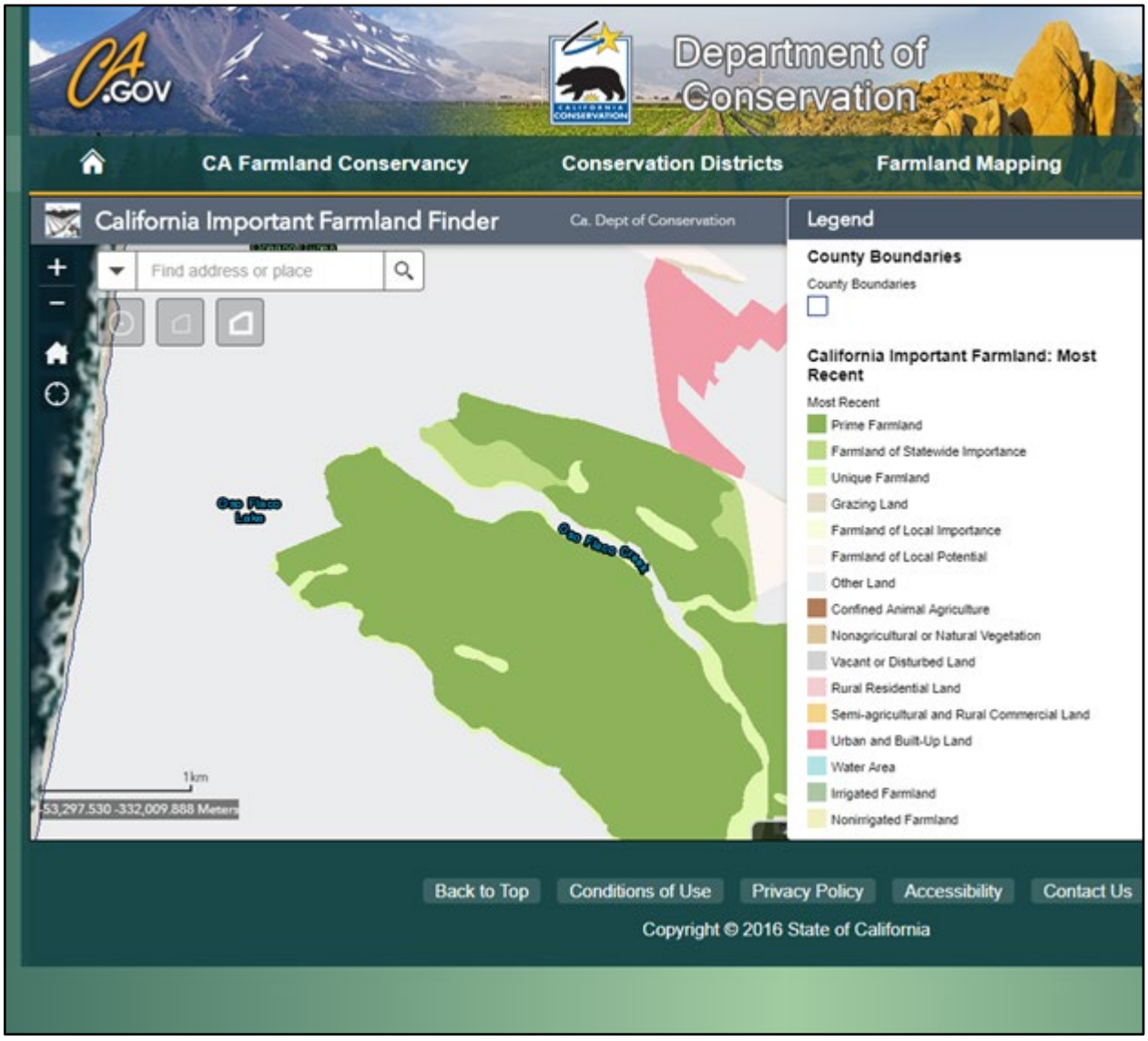
Appendix A: Project Maps + Photos

4. SLO CO zoning Map



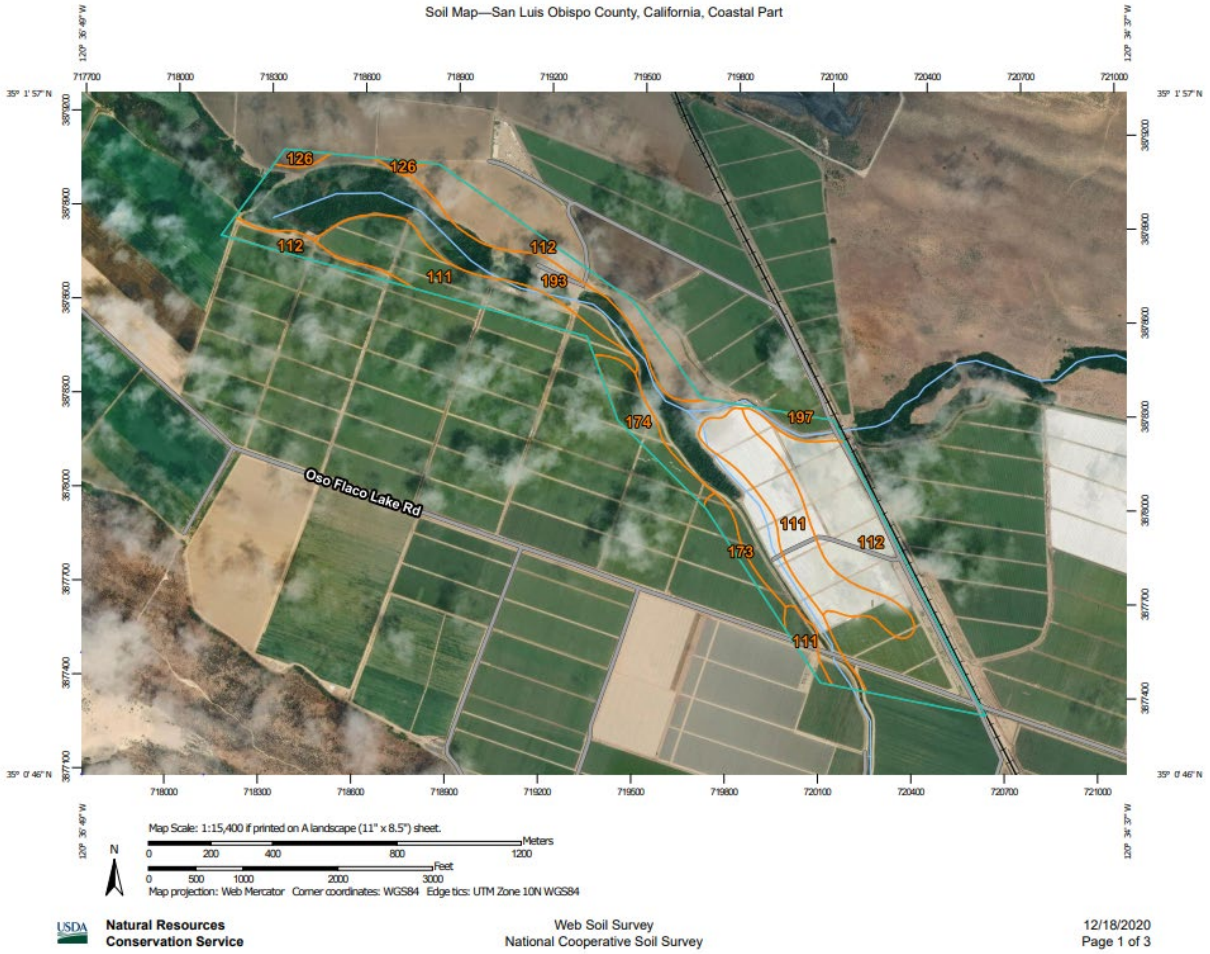
Appendix A: Project Maps + Photos

5. Prime Farmland



Appendix A: Project Maps + Photos

6. Soils Map



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
111	Camarillo sandy loam, 0 to 2 percent slopes, cool MAAT, MLRA 14	8.9	4.2%
112	Camarillo loam, drained	99.1	47.3%
126	Corralitos variant loamy sand	12.1	5.8%
134	Dune land	0.7	0.3%
174	Mocho loam, 0 to 2 percent slopes, MLRA 14	14.0	6.7%
193	Psamments and Fluvents, wet	73.6	35.1%
228	Water	1.2	0.6%
Totals for Area of Interest		**209.7**	**100.0%**

Appendix B: Avoidance + Mitigation Measures

Remediation of Pesticides in the Oso Flaco Watershed Avoidance and Mitigation Measures

A. CRLF:

A-1. Only Service-approved biologists would participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

A-2. Ground disturbance would not begin until written approval is received from the Service that project biologist(s) are qualified to conduct the work.

A-3. A Service-approved biologist would survey the project site no more than 48 hours before the onset of work activities. If any life stage of the California red-legged frog is found and these individuals are likely to be killed or injured by work activities, the approved biologist would be allowed sufficient time to move them from the site before work begins. The Service-approved biologist would relocate the California red-legged frogs the shortest distance possible to a location that contains suitable habitat and that would not be affected by activities associated with the proposed project. The relocation site should be in the same drainage to the extent practicable. The project proponent would coordinate with the Service on the relocation site prior to the capture of any California red-legged frogs.

A-4. Before any activities begin on a project, a Service-approved biologist would conduct a training session for all construction personnel. At a minimum, the training would include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the California red-legged frog for the current project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, if a qualified person is on hand to answer any questions.

A-5. A Service-approved biologist would be present at the work site until all California red-legged frogs have been relocated out of harm's way, workers have been instructed, and disturbance of habitat has been completed. After this time, the sponsoring agency or project proponent may designate a person to monitor onsite compliance with all minimization measures. The Service-approved biologist will ensure that this monitor receives the training outlined in measure 4 above and in the identification of California red-legged frogs. If the monitor or the Service-approved biologist recommends that work be stopped because California red-legged frogs would be affected in a manner not anticipated by the sponsoring agency, project proponent, or the Service during review of the proposed action, they would notify a project supervisor immediately. The project supervisor would either resolve the situation by eliminating the adverse effect immediately or require that all actions causing these effects be halted. If work is stopped, the Service would be notified as soon as possible.

A-6. During project activities, the project proponent would properly contain, remove from the work site, and dispose of regularly all trash that may attract predators. Following construction, the project proponent would remove all trash and construction debris from work areas.

A-7. All refueling, maintenance, and staging of equipment and vehicles would occur at least 60 feet from riparian habitat or water bodies and in a location from where a spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water). The monitor would ensure

contamination of habitat does not occur during such operations. Prior to the onset of work, the project proponent would ensure that a plan is in place for prompt and effective response to any accidental spills. The project proponent would inform all workers of the importance of preventing spills and of the appropriate measures to take should a spill occur.

A-8. The project proponent would return habitat contours to their original configuration at the end of project activities in all areas disturbed by activities associated with the project unless the Service and the project proponent determine that it is not feasible or modification of original contours would benefit the California red legged frog.

A-9. The project proponent would limit the number of access routes, size of staging areas, and the total area of the activity to the minimum necessary to achieve the project goals. The project proponent would delineate Environmentally Sensitive Areas to confine access routes and construction areas to the minimum area necessary to complete construction, and minimize the impact to California red-legged frog habitat; this goal includes locating access routes and construction areas outside of wetlands and riparian areas to the maximum extent practicable.

A-10. If work must occur during the breeding season, the project proponent would implement the following measures as well:

A-10-a. No work would occur during or 24 hours after any rain event to minimize impacts to dispersing and breeding California red-legged frogs. A rain event is considered any precipitation resulting in 0.2" or greater of precipitation. A Service-approved biologist would survey the project site immediately before resuming project activities.

A-10-b. The project proponent would conduct project activities no earlier than 30 minutes after sunrise and no later than 30 minutes before sunset each day.

A-10-c. The project proponent would survey the project area daily before activities begin and monitor all project activities using a Service-approved biologist

A-11. The project proponent would cover dirt or sand piles left overnight with tarps or plastic to prevent California red-legged frogs from sheltering in the material. All holes and trenches would be inspected each morning by a biological monitor. A Service-approved biologist would relocate any California red-legged frogs found in a hole or trench.

A-12. To control sedimentation during and after project implementation the project proponent would implement best management practices outlined in any authorizations or permits issued under the authorities of the Clean Water Act that it receives for the specific project. If best management practices are ineffective, the project proponent would attempt to remedy the situation immediately, in coordination with the Service.

A-13. If a work site is to be temporarily dewatered by pumping, the project proponent would completely screen intakes with mesh not larger than 0.2 inch to prevent California red-legged frogs from entering the pump system. The project proponent would release or pump downstream water at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, the project proponent would remove any diversions or barriers to flow in a manner that would allow flow to resume with the least disturbance to the substrate. The project

proponent would minimize alteration of the streambed to the maximum extent possible. The project proponent would remove any imported material from the streambed upon completion of the project.

A-14. Unless approved by the Service, the project proponent would not impound water in the course of project activities in a manner that may attract California red-legged frogs.

A-15. A Service-approved biologist would permanently remove any individuals of non-native species, such as bullfrogs (Rana catesbeiana), signal and red swamp crayfish (Pacifastacus leniusculus; Procambarus clarkii), and centrarchid fishes from the project area, to the maximum extent possible. The Service-approved biologist would be responsible for ensuring his or her activities comply with the California Fish and Game Code.

A-16. To ensure that diseases are not conveyed between work sites by the Service-approved biologist, the biologists would follow the fieldwork code of practice developed by the Declining Amphibian Populations Task Force at all times.

A-17. Project proponents would re-vegetate project sites with an assemblage of native riparian, wetland, and upland vegetation suitable for the area. The project proponent would use locally collected plant materials to the extent practicable. The project proponent would control invasive, exotic plants to the maximum extent practicable. The project proponent would implement this measure in all areas disturbed by activities associated with the project, unless the Service and the sponsoring agency determine that it is not feasible or practical.

A-18. If the project proponent or sponsoring agency determines the use of herbicides is necessary for their project, they would coordinate further with the Service to develop suitable avoidance and minimization measures for herbicide use for their project

A. <u>Protection of Listed Plants: marsh sandwort, Gambel's watercress</u>

In the event that the Project is performed after the growing season (after October 1), the following avoidance and mitigation measures will apply:

B-1. The District will prepare a binder to remain on site throughout construction. The binder will contain all avoidance and minimization measures, permits, and authorizations for the project. Prior to construction, the District will review all avoidance and minimization measures with heavy equipment operator(s) and construction crew.

B-2. A qualified botanist will conduct a pre-construction survey to confirm absence of marsh sandwort and Gambel's watercress prior to commencing ground disturbance activities in the project area. If the plants are found during pre-construction surveys, including any Gambel's watercress hybrids, the botanist will flag the area and inform all workers of the need to stay out of the flagged area.

B-3. Prior to the onset of activities that could affect listed plant habitat, a qualified biologist will conduct a training session for all personnel. At a minimum, the training will include a description of relevant plants and its habitat and AMMs that should be implemented. The training session will be repeated for any new personnel.

<u>C. Protection of California Least Tern (LETE)</u> In the event that the Project is performed after the

breeding season (after October 1), the following avoidance and minimization measures will apply:

C-1. The District will prepare a binder to remain on site throughout construction. The binder will contain all avoidance and minimization measures, permits, and authorizations for the project. Prior to construction, CDPR will review all avoidance and minimization measures with heavy equipment operator(s) and construction crew.

C-2. A training session for all construction personnel will be conducted by a qualified biologist prior to the start of project activities. At a minimum, the training will include a description of LETE and its habitat, the status of LETE, the general avoidance and minimization measures that are being implemented to protect the LETE as they relate to the project, and the boundaries within which project construction will be conducted.

C-3. If any activities are scheduled when LETE are known to be present (generally between April 15 and September 15) qualified biologists will continue to be on site during activities taking place at these locations. If LETE are not foraging nearby or biologists observing LETE foraging activity determine that LETE will not be disturbed by the activities, it may proceed as planned. However, if LETE are present and have the potential to be disturbed, the biologist will continue to direct activities to stop within 250 feet of the bird until it leaves on its own accord.

Sediment Control Measures: See Appendix D for a complete list of Sediment Control Measures.

D. General Protection of Riparian and Aquatic Habitats

D-1. A qualified biologist will be on site during all construction phases that include activity in the lake or creek channel.

D-2. Refueling, maintenance, and staging of equipment and vehicles will occur at least 60 feet from riparian habitat or water bodies in a location where a spill would not drain directly toward aquatic habitat. Secondary containment will be used during refueling.

D-3. All vehicles used near riparian areas will be clean and free of leaks.

D-4. To minimize further disturbance to the work area, CDPR will limit crew size, and number of vehicles and equipment to the maximum extent feasible.

D-5. Removal of any vegetation will be minimized to the extent feasible.

E. Mitigation of impacts to Wetlands:

E-1. Jurisdictional agencies will be consulted prior to, as well as during and after construction to ensure impacts to wetlands are minimal.

E-2. Project activities will avoid, to the maximum feasible extent, impacting wetland area

E-3. where impacts are unavoidable, equipment use will be regulated, traffic will not be permitted, and vegetation removal will be limited.

E-4. Depending on determinations made by the ACOE, compensatory mitigation will be completed at

the requisite ratio to impacts.

E-5. No fill or dredge material will be placed within a designated wetland.

F. Basic Construction Management Practices:

F-1. The District Project manager, in conjunction with the USFWS-approved CRLF monitor, will approve vegetation clearing before and during project construction.

F-2. Limits of disturbance and staging area will be flagged. Flagging will be maintained throughout construction.

F-3. Extent of disturbed areas will be minimized as most feasible.

F-4. Diesel equipment idling will be limited to no more than five minutes and post a sign at the construction staging area reminding equipment operators of this five-minute idling limit.

F-5. A certified mechanic will check and determine that all equipment is running in proper condition prior to construction operations.

F-6. All construction equipment will be maintained in accordance with manufacturer's specifications.

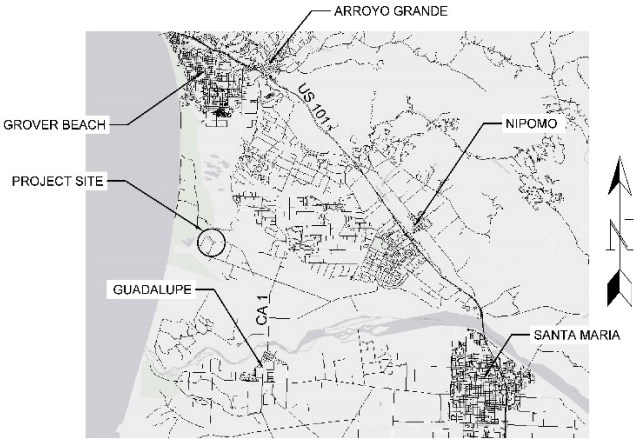
Appendix C: 60% Design Plans

PROJECT PLANS FOR

OSO FLACO CREEK REMEDIATION PROJECT

IN SAN LUIS OBISPO COUNTY,CALIFORNIA

VICINITY MAP
NTS



REGIONAL MAP
NTS

PROJECT DESCRIPTION

THESE DRAWINGS PROVIDE 60% LEVEL DESIGN DETAILS FOR THE REMEDIATION OF LITTLE OSO FLACO CREEK TO REMOVE CONTAMINATED SEDIMENT AND ENCROACHING VEGETATION AND INSTALL FEATURES TO AMELIORATE FUTURE DEPOSITION. LITTLE OSO FLACO CREEK IS LOCATED OFF OF OSO FLACO LAKE ROAD IN SAN LUIS OBISPO COUNTY, CA.

WORK SHALL CONSIST OF THE PARTIAL DREDGING OF THE CREEK CHANNEL, VEGETATION REMOVAL IN THE CREEK CHANNEL, AND THE LAND APPLICATION OF THE DREDGED SEDIMENT, AS WELL AS IMPROVEMENTS TO A CULVERT THROUGH WHICH THE CREEK PASSES AND THE INSTALLATION OF A SEDIMENT BASIN TO PREVENT THE EROSION OF FURTHER SEDIMENT INTO THE CREEK.

SHEET INDEX:

60% DESIGN

COASTAL SAN LUIS RESOURCE CONSERVATION DISTRICT
1203 Main St. Suite B
Morro Bay, CA 93442
(805)772-4391
www.coastalrcd.org

SCALE	REV NO	DATE	REVISIONS	APPROVED BY
AS SHOWN				
DESIGNED BY JTM				
DRAWN BY JTM				
CHECKED BY ----				

PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD

SHEET TITLE: **TITLE SHEET**
PROJECT: OSO FLACO CREEK REMEDIATION PROJECT

PROJECT NO	
4124-19	
SHEET NO	SHEET NO
T-1	1 OF 7
MEMBER DATE	
2021-03-10	

GENERAL NOTES

1. THESE PLANS ARE PART OF A SET OF CONTRACT DOCUMENTS WHICH INCLUDES GENERAL AND SPECIAL PROVISIONS AND TECHNICAL SPECIFICATIONS. WORK TO BE PERFORMED IS SUBJECT TO PROVISIONS IN ALL OF THESE CONTRACT DOCUMENTS, AND THESE PLANS SHALL NOT BE CONSIDERED THE SOLE SOURCE OF CONSTRUCTION INFORMATION.
2. STANDARD SPECIFICATIONS - ALL CONSTRUCTION SHALL CONFORM TO THE 2010 EDITION OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS ISSUED BY THE DEPARTMENT OF TRANSPORTATION (STANDARD SPECIFICATIONS), AS MODIFIED BY THE SPECIAL PROVISIONS FOR THIS PROJECT.
3. APPROVED PLANS - NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS APPROVED BY TEIXEIRA FARMS INC. (OWNER) AND THE COASTAL SAN LUIS RESOURCE CONSERVATION DISTRICT (ENGINEER). OWNER AND ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION. ANY CONSTRUCTION DONE WITHOUT APPROVED PLANS OR WITHOUT NOTIFICATION TO THE OWNER AND ENGINEER MAY BE REJECTED AND WILL AT THE CONTRACTOR'S AND/OR OWNER'S RISK. THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS FOR THIS PROJECT ON THE SITE AT ALL TIMES, AND SHALL BE FAMILIAR WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
4. EXISTING UNDERGROUND FACILITIES - THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND FACILITIES ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR LOCATING OR HAVING LOCATED ALL EXISTING UNDERGROUND UTILITIES AND OTHER FACILITIES AND FOR PROTECTING THE SAME DURING THE COURSE OF THE PROJECT. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROTECTING SUCH UTILITIES.
5. EXISTING MONUMENTS AND OTHER SURVEY MARKERS - ANY SURVEY MONUMENTS DESTROYED, DAMAGED, OR MOVED BY THE CONTRACTOR SHALL BE REPLACED IN ACCORDANCE WITH THE STATE LAND SURVEYOR'S ACT AT THE CONTRACTOR'S EXPENSE.
6. THESE DRAWINGS REPRESENT THE FINISHED CONDITION AND UNLESS OTHERWISE INDICATED, THEY DO NOT SHOW THE METHOD OF CONSTRUCTION.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO THE PERMIT CONDITIONS OF APPROVAL FOR THIS PROJECT.
8. ONSITE VEHICLE SPEED ON UNPAVED SURFACES SHALL BE LIMITED TO 10 MPH.
9. CONTRACTOR SHALL UTILIZE ONLY THE APPROVED ACCESS AND HAUL ROADS, ACCESS POINTS, AND STAGING AREAS (AS SHOWN ON THESE PLANS) FOR TRANSPORT AND STORAGE OF MATERIALS AND EQUIPMENT.
10. ALL AREAS OUTSIDE THE DESIGNATED PROJECT SITE AND ACCESS AND HAUL ROADS (AS SHOWN ON THESE PLANS) ARE OFF LIMITS DURING CONSTRUCTION.
11. NO HEAVY EQUIPMENT SHALL BE USED IN FLOWING WATER. VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN, OPERATED, FUELED, CLEANED, MAINTAINED, OR STORED IN THE WET OR DRY PORTIONS OF A WATER BODY WHERE WETLAND VEGETATION, RIPARIAN VEGETATION, OR AQUATIC ORGANISMS MAY BE DAMAGED.

SURVEY NOTES

1. TOPOGRAPHIC MAPPING WAS PERFORMED IN JANUARY 2017 AND FEBRUARY - MARCH 2021 BY WBS LAND SURVEYORS AND CENTRAL COAST AERIAL MAPPING.
2. THE BENCH MARK FOR THIS PROJECT IS A NAIL SHANK ON TOP OF CONCRETE BLOCK FOUND NEAR THE WESTERN SHORE OF LITTLE OSO FLACO LAKE, ESTABLISHED IN 2008 BY ROBERT REESE WATER & LAND SURVEY SERVICES USING ELLIPSOIDAL HEIGHT AND GEOID03.
   ELEVATION = 25.61' (NAVD88)
3. BASIS OF COORDINATES AND BEARINGS
   THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF NAD1983, CCS83, ZONE 5 0405, (2002) IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. POINT NUMBER 1000.
   THE POSITION OF POINT 1000 WAS ESTABLISHED BY TIES TO CORS STATIONS AT PID DE6580, DE8612 AND DK4195 IN 2008 BY ROBERT REESE WATER & LAND SURVEYING SERVICES.

   MONUMENT TYPE - GPS BASE POINT, NAIL SHANK ON TOP OF CONCRETE BASE FOUND ON THE WESTERN SHORE OF LITTLE OSO FLACO LAKE.

STATION	NORTHING (FT)	EASTING (FT)	MAPPING ANGLE	COMBINATION FACTOR	ELEVATION (NAVD88)(FT)	ELLIPSOID HEIGHT
1003	2,208,142.7895	5779560.6196	1°29'21.537"	1.00000013	25.61	-90.778247

4. TO OBTAIN GROUND DISTANCES AND GEODETIC NORTH, MULTIPLE GRID DISTANCES (DISTANCES SHOWN HEREON) BY 0.9999341 AND ROTATE GRID BEARINGS COUNTERCLOCKWISE BY 1°29'21.537" TO OBTAIN GEODETIC BEARINGS. CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS AND DISTANCES SHOWN ARE IN DECIMAL FEET.
5. SURVEY FOR THIS PROJECT DID NOT INCLUDE A BOUNDARY SURVEY. NO BOUNDARY INFORMATION OR PROPERTY LINES ARE SHOWN HEREON.

COASTAL SAN LUIS RESOURCE CONSERVATION DISTRICT
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Morro Bay, CA 93442
(805)772-4391
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SCALE: AS SHOWN
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY: ----

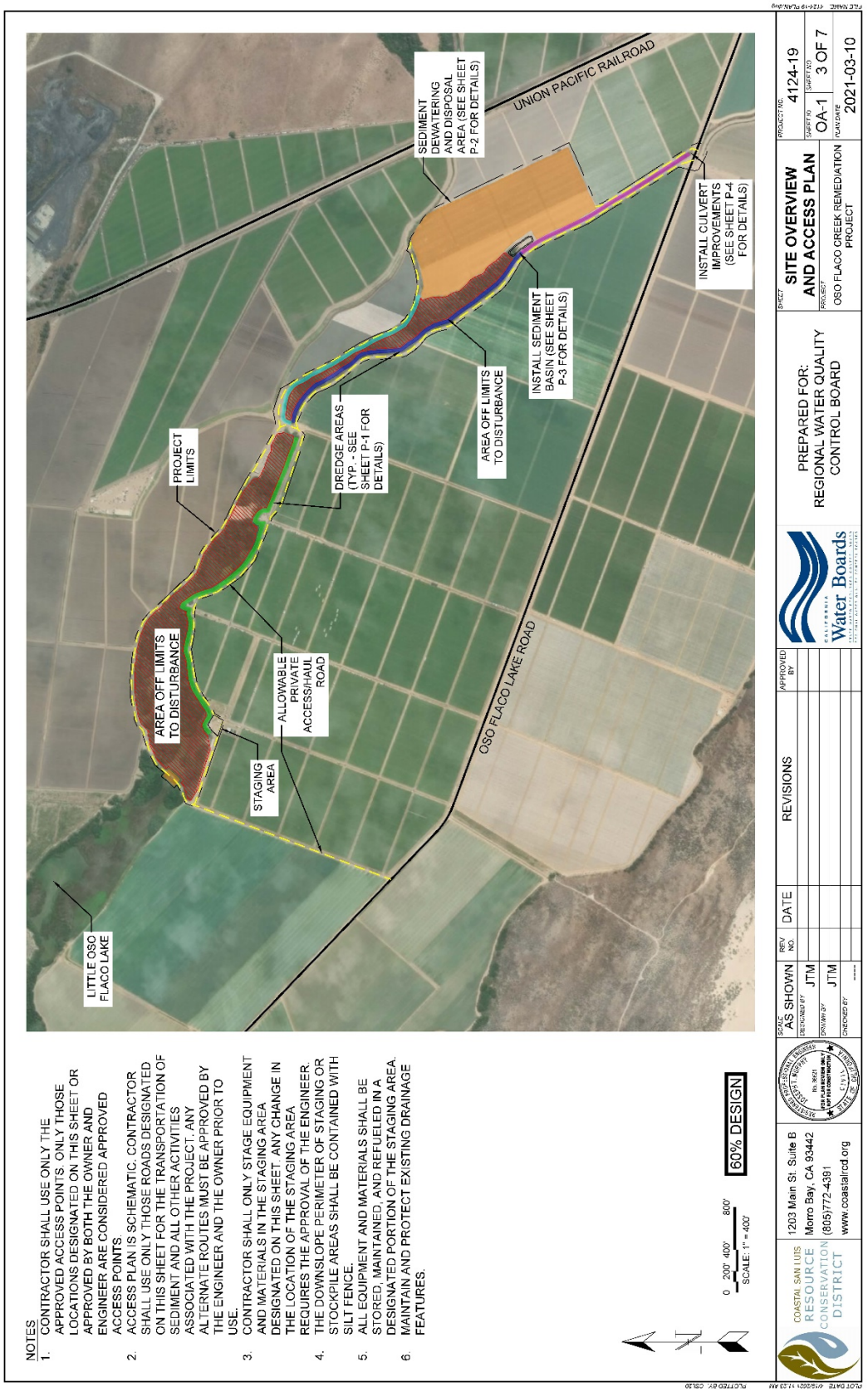
REV NO	DATE	REVISIONS	APPROVED BY

PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD

CALIFORNIA Water Boards

SHEET: GENERAL NOTES
PROJECT: OSO FLACO CREEK REMEDIATION PROJECT
PROJECT NO: 4124-19
SHEET ID: GN-1
SHEET NO: 2 OF 7
PLOT DATE: 2021-03-10

PLOT DATE: 4/19/2021 11:23 AM
PLOTTED BY: CCLCS
FILE NAME: 4124-19 PLAN.DWG


NOTES
1. CONTRACTOR SHALL USE ONLY THE APPROVED ACCESS POINTS. ONLY THOSE LOCATIONS DESIGNATED ON THIS SHEET OR APPROVED BY BOTH THE OWNER AND ENGINEER ARE CONSIDERED APPROVED ACCESS POINTS.
2. ACCESS PLAN IS SCHEMATIC. CONTRACTOR SHALL USE ONLY THOSE ROADS DESIGNATED ON THIS SHEET FOR THE TRANSPORTATION OF SEDIMENT AND ALL OTHER ACTIVITIES ASSOCIATED WITH THE PROJECT. ANY ALTERNATE ROUTES MUST BE APPROVED BY THE ENGINEER AND THE OWNER PRIOR TO USE.
3. CONTRACTOR SHALL ONLY STAGE EQUIPMENT AND MATERIALS IN THE STAGING AREA DESIGNATED ON THIS SHEET. ANY CHANGE IN THE LOCATION OF THE STAGING AREA REQUIRES THE APPROVAL OF THE ENGINEER.
4. THE DOWNSLOPE PERIMETER OF STAGING OR STOCKPILE AREAS SHALL BE CONTAINED WITH SILT FENCE.
5. ALL EQUIPMENT AND MATERIALS SHALL BE STORED, MAINTAINED, AND REFUELED IN A DESIGNATED PORTION OF THE STAGING AREA.
6. MAINTAIN AND PROTECT EXISTING DRAINAGE FEATURES.
0 200' 400' 800'
SCALE: 1" = 400'
60% DESIGN
LITTLE OSO FLACO LAKE
AREA OFF LIMITS TO DISTURBANCE
PROJECT LIMITS
STAGING AREA
ALLOWABLE PRIVATE ACCESS/HAUL ROAD
DREDGE AREAS (TYP. - SEE SHEET P-1 FOR DETAILS)
OSO FLACO LAKE ROAD
AREA OFF LIMITS TO DISTURBANCE
INSTALL SEDIMENT BASIN (SEE SHEET P-3 FOR DETAILS)
INSTALL CULVERT IMPROVEMENTS (SEE SHEET P-4 FOR DETAILS)
SEDIMENT DEWATERING AND DISPOSAL AREA (SEE SHEET P-2 FOR DETAILS)
UNION PACIFIC RAILROAD
COASTAL SAN LUIS RESOURCE CONSERVATION DISTRICT
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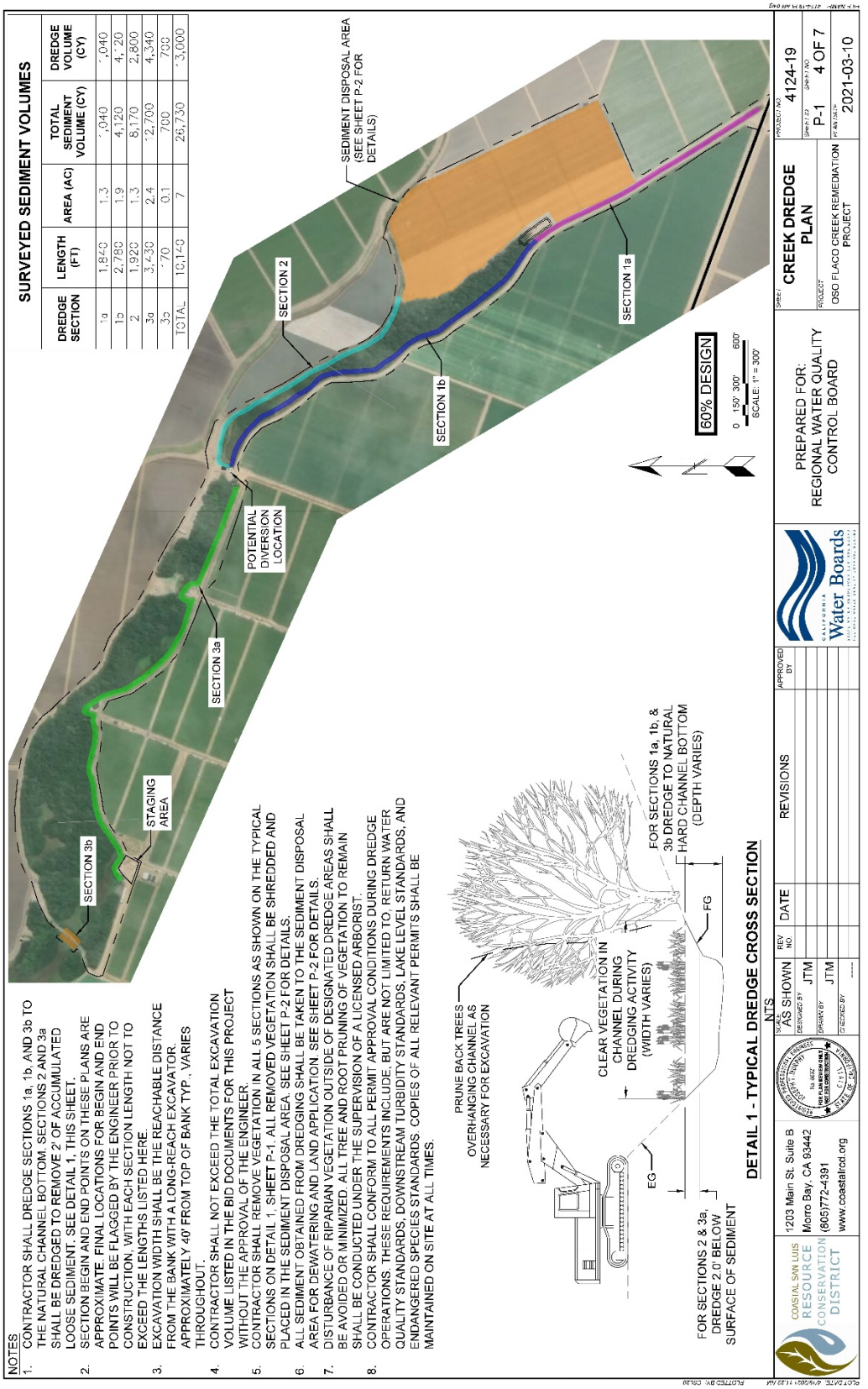
SCALE: AS SHOWN
DESIGNED BY: JTM
DRAWN BY: JTM
CHECKED BY:
REV NO.
DATE
REVISIONS
APPROVED BY
PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD
SHEET: SITE OVERVIEW AND ACCESS PLAN
PROJECT: OSO FLACO CREEK REMEDIATION PROJECT
PROJECT NO.: 4124-19
SHEET NO: OA-1
SHEET NO: 3 OF 7
PLAN DATE: 2021-03-10


SURVEYED SEDIMENT VOLUMES
DREDGE SECTION | LENGTH (FT) | AREA (AC) | TOTAL SEDIMENT VOLUME (CY) | DREDGE VOLUME (CY)
1a | 1,840 | 1.3 | 1,040 | 1,040
1b | 2,780 | 1.9 | 4,120 | 4,120
2 | 1,920 | 1.3 | 8,170 | 2,800
3a | 3,430 | 2.4 | 12,700 | 4,340
3b | 70 | 0.1 | 700 | 700
TOTAL | 10,140 | 7 | 26,730 | 13,000
NOTES
1. CONTRACTOR SHALL DREDGE SECTIONS 1a, 1b, AND 3b TO THE NATURAL CHANNEL BOTTOM. SECTIONS 2 AND 3a SHALL BE DREDGED TO REMOVE 2' OF ACCUMULATED LOOSE SEDIMENT. SEE DETAIL 1, THIS SHEET.
2. SECTION BEGIN AND END POINTS ON THESE PLANS ARE APPROXIMATE. FINAL LOCATIONS FOR BEGIN AND END POINTS WILL BE FLAGGED BY THE ENGINEER PRIOR TO CONSTRUCTION, WITH EACH SECTION LENGTH NOT TO EXCEED THE LENGTHS LISTED HERE.
3. EXCAVATION WIDTH SHALL BE THE REACHABLE DISTANCE FROM THE BANK WITH A LONG-REACH EXCAVATOR. APPROXIMATELY 40' FROM TOP OF BANK TYP., VARIES THROUGHOUT.
4. CONTRACTOR SHALL NOT EXCEED THE TOTAL EXCAVATION VOLUME LISTED IN THE BID DOCUMENTS FOR THIS PROJECT WITHOUT THE APPROVAL OF THE ENGINEER.
5. CONTRACTOR SHALL REMOVE VEGETATION IN ALL 5 SECTIONS AS SHOWN ON THE TYPICAL SECTIONS ON DETAIL 1, SHEET P-1. ALL REMOVED VEGETATION SHALL BE SHREDDED AND PLACED IN THE SEDIMENT DISPOSAL AREA. SEE SHEET P-2 FOR DETAILS.
6. ALL SEDIMENT OBTAINED FROM DREDGING SHALL BE TAKEN TO THE SEDIMENT DISPOSAL AREA FOR DEWATERING AND LAND APPLICATION. SEE SHEET P-2 FOR DETAILS.
7. DISTURBANCE OF RIPARIAN VEGETATION OUTSIDE OF DESIGNATED DREDGE AREAS SHALL BE AVOIDED OR MINIMIZED. ALL TREE AND ROOT PRUNING OF VEGETATION TO REMAIN SHALL BE CONDUCTED UNDER THE SUPERVISION OF A LICENSED ARBORIST.
8. CONTRACTOR SHALL CONFORM TO ALL PERMIT APPROVAL CONDITIONS DURING DREDGE OPERATIONS. THESE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO, RETURN WATER QUALITY STANDARDS, DOWNSTREAM TURBIDITY STANDARDS, LAKE LEVEL STANDARDS, AND ENDANGERED SPECIES STANDARDS. COPIES OF ALL RELEVANT PERMITS SHALL BE MAINTAINED ON SITE AT ALL TIMES.
SECTION 3b
STAGING AREA
SECTION 3a
POTENTIAL DIVERSION LOCATION
SECTION 2
SECTION 1a
SECTION 1b
SEDIMENT DISPOSAL AREA (SEE SHEET P-2 FOR DETAILS)
60% DESIGN
0 150' 300' 600'
SCALE: 1" = 300'
DETAIL 1 - TYPICAL DREDGE CROSS SECTION
NTS
PRUNE BACK TREES OVERHANGING CHANNEL AS NECESSARY FOR EXCAVATION
CLEAR VEGETATION IN CHANNEL DURING DREDGING ACTIVITY (WIDTH VARIES)
FOR SECTIONS 1a, 1b, & 3b DREDGE TO NATURAL HARD CHANNEL BOTTOM (DEPTH VARIES)
EG
FG
FOR SECTIONS 2 & 3a, DREDGE 2.0' BELOW SURFACE OF SEDIMENT
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SCALE: AS SHOWN
DESIGNED BY: JTM
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CHECKED BY:
REV NO. | DATE | REVISIONS | APPROVED BY
PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD
CALIFORNIA Water Boards
SHEET: CREEK DREDGE PLAN
PROJECT: OSO FLACO CREEK REMEDIATION PROJECT
PROJECT NO: 4124-19
SHEET NO: P-1
SHEET NO: 4 OF 7
DATE: 2021-03-10

NOTES
1. THE EXTENTS OF THE SEDIMENT DISPOSAL AREA SHOWN ON THESE PLANS IS APPROXIMATE. THE FINAL LIMITS OF THE AREA WILL BE FLAGGED IN THE FIELD BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. THE DREDGING OF CREEK SEDIMENT AND PLACEMENT ON THE DISPOSAL SITE IS NOT EXPECTED TO GENERATE RETURN WATER, BUT AS A CONTINGENCY THE CONTRACTOR SHALL SUBMIT A RETURN WATER PLAN TO THE ENGINEER AT LEAST 2 WEEKS BEFORE THE COMMENCEMENT OF DREDGING AND DISPOSAL ACTIVITY. CONSTRUCTION OF THOSE FACILITIES SHALL NOT BEGIN UNTIL THE ENGINEER HAS APPROVED THE PLAN
3. CONTRACTOR'S RETURN WATER PLAN SHALL ENSURE THAT ALL WATER RETURNED TO THE CREEK IS TREATED TO CONFORM TO ALL RELEVANT PERMIT REQUIREMENTS BEFORE BEING RETURNED TO THE CREEK.
4. DREDGED SEDIMENT SHALL BE PLACED IN LIFTS OF 1 FOOT, WITH DISCING AND COMPOST APPLICATION OCCURRING BETWEEN EACH LIFT.
5. GRADE AT ANY POINT ON THE SEDIMENT DISPOSAL SITE SHALL NOT BE RAISED MORE THAN 5 FEET.
60% DESIGN
SEDIMENT DISPOSAL SITE (~26.3 ACRES)
AREA OF LIMITS TO DISTURBANCE
0 50' 100' 200'
SCALE: 1" = 100'
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1203 Main St. Suite B
Morro Bay, CA 93442
(805)772-4391
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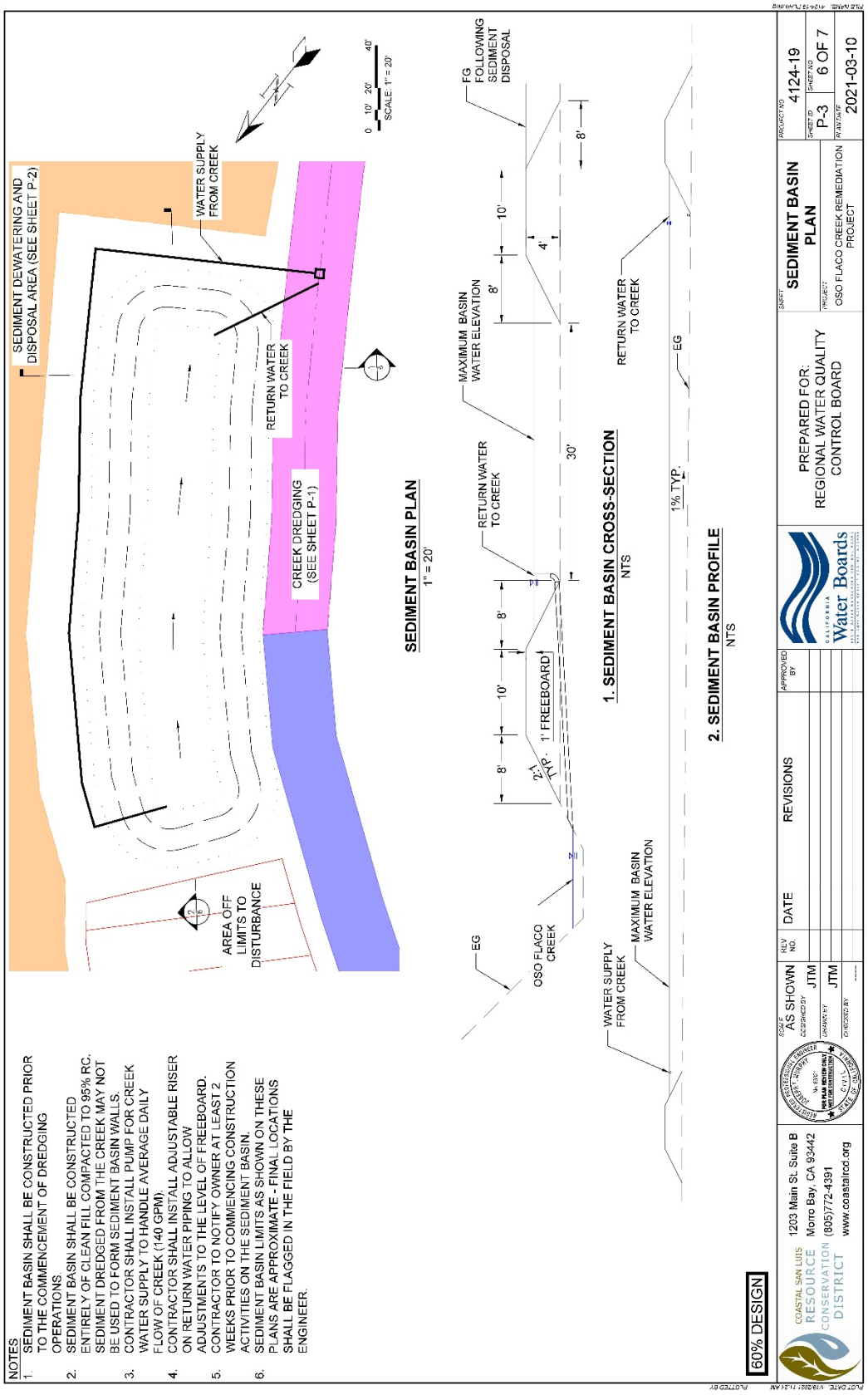
PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD
CALIFORNIA Water Boards
SHEET SEDIMENT DISPOSAL PLAN
PROJECT OSO FLACO CREEK REMEDIATION PROJECT
PROJECT NO. 4124-19
SHEET NO. P-2
SHEET NO. 5 OF 7
AS-BUILT DATE 2021-03-10


NOTES
1. SEDIMENT BASIN SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF DREDGING OPERATIONS.
2. SEDIMENT BASIN SHALL BE CONSTRUCTED ENTIRELY OF CLEAN FILL COMPACTED TO 95% RC. SEDIMENT DREDGED FROM THE CREEK MAY NOT BE USED TO FORM SEDIMENT BASIN WALLS.
3. CONTRACTOR SHALL INSTALL PUMP FOR CREEK WATER SUPPLY TO HANDLE AVERAGE DAILY FLOW OF CREEK (140 GPM).
4. CONTRACTOR SHALL INSTALL ADJUSTABLE RISER ON RETURN WATER PIPING TO ALLOW ADJUSTMENTS TO THE LEVEL OF FREEBOARD.
5. CONTRACTOR TO NOTIFY OWNER AT LEAST 2 WEEKS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES ON THE SEDIMENT BASIN.
6. SEDIMENT BASIN LIMITS AS SHOWN ON THESE PLANS ARE APPROXIMATE - FINAL LOCATIONS SHALL BE FLAGGED IN THE FIELD BY THE ENGINEER.
SEDIMENT DEWATERING AND DISPOSAL AREA (SEE SHEET P-2)
WATER SUPPLY FROM CREEK
RETURN WATER TO CREEK
CREEK DREDGING (SEE SHEET P-1)
AREA OFF LIMITS TO DISTURBANCE
SEDIMENT BASIN PLAN
1" = 20'
SCALE: 1" = 20'
1. SEDIMENT BASIN CROSS-SECTION
NTS
EG
OSO FLACO CREEK
WATER SUPPLY FROM CREEK
MAXIMUM BASIN WATER ELEVATION
RETURN WATER TO CREEK
FG FOLLOWING SEDIMENT DISPOSAL
2:1 TYP.
1' FREEBOARD
8'
10'
30'
4'
2. SEDIMENT BASIN PROFILE
NTS
1% TYP.
60% DESIGN
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JTM
REV NO.
DATE
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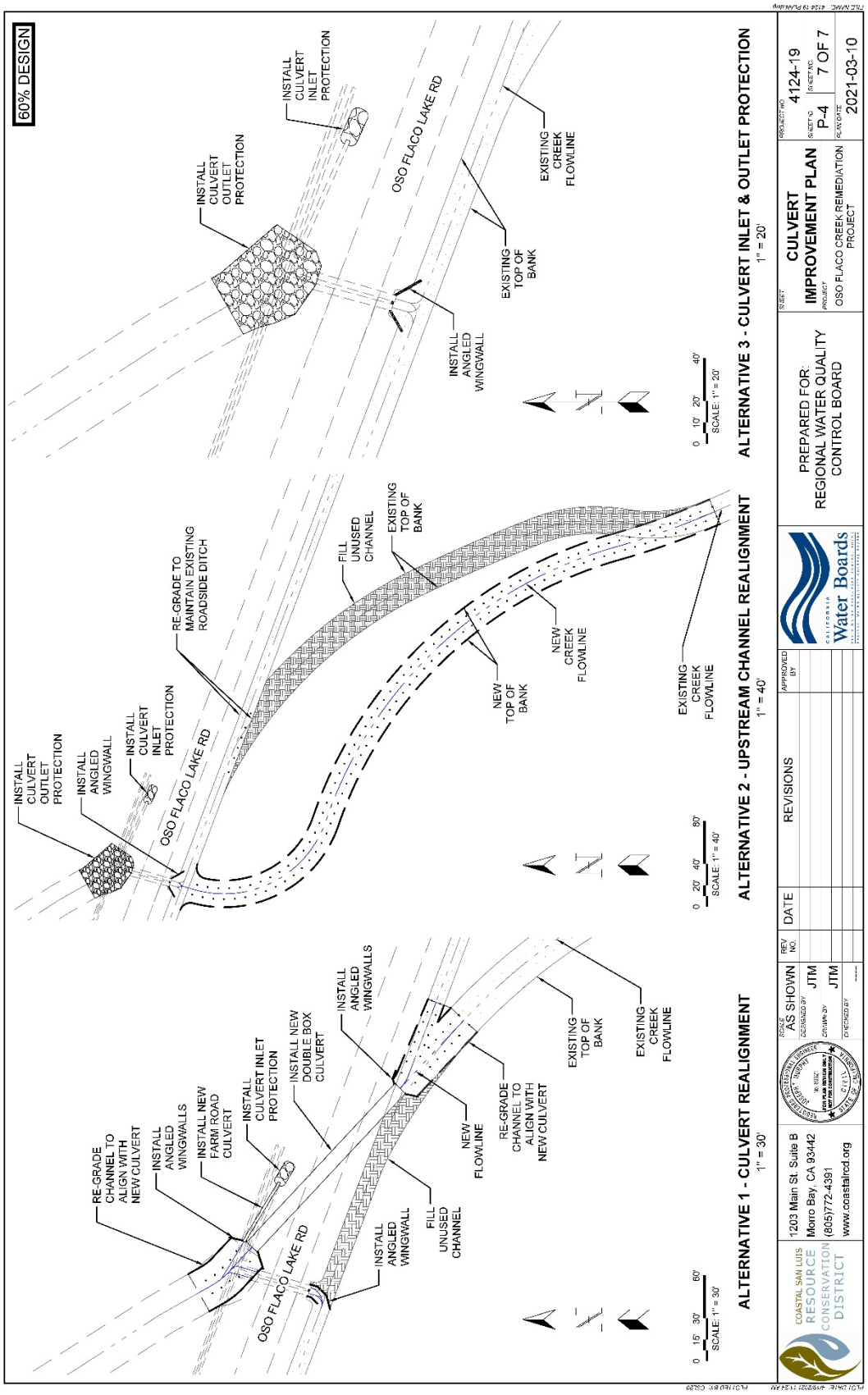
APPROVED BY
PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD
SHEET
SEDIMENT BASIN PLAN
PROJECT
OSO FLACO CREEK REMEDIATION PROJECT
PROJECT NO
4124-19
SHEET ID
P-3
SHEET NO
6 OF 7
PLAN DATE
2021-03-10


60% DESIGN
ALTERNATIVE 1 - CULVERT REALIGNMENT
1" = 30'
SCALE: 1" = 30'
ALTERNATIVE 2 - UPSTREAM CHANNEL REALIGNMENT
1" = 40'
SCALE: 1" = 40'
ALTERNATIVE 3 - CULVERT INLET & OUTLET PROTECTION
1" = 20'
SCALE: 1" = 20'
RE-GRADE CHANNEL TO ALIGN WITH NEW CULVERT
INSTALL ANGLED WINGWALLS
INSTALL NEW FARM ROAD CULVERT
INSTALL CULVERT INLET PROTECTION
INSTALL NEW DOUBLE BOX CULVERT
INSTALL ANGLED WINGWALLS
OSO FLACO LAKE RD
INSTALL ANGLED WINGWALL
FILL UNUSED CHANNEL
NEW FLOWLINE
RE-GRADE CHANNEL TO ALIGN WITH NEW CULVERT
EXISTING TOP OF BANK
EXISTING CREEK FLOWLINE
INSTALL CULVERT OUTLET PROTECTION
INSTALL ANGLED WINGWALL
INSTALL CULVERT INLET PROTECTION
OSO FLACO LAKE RD
RE-GRADE TO MAINTAIN EXISTING ROADSIDE DITCH
FILL UNUSED CHANNEL
EXISTING TOP OF BANK
NEW TOP OF BANK
NEW CREEK FLOWLINE
EXISTING CREEK FLOWLINE
INSTALL CULVERT OUTLET PROTECTION
INSTALL CULVERT INLET PROTECTION
OSO FLACO LAKE RD
INSTALL ANGLED WINGWALL
EXISTING TOP OF BANK
EXISTING CREEK FLOWLINE
REVISIONS
DATE
APPROVED BY
PREPARED FOR:
REGIONAL WATER QUALITY CONTROL BOARD
SHEET
CULVERT IMPROVEMENT PLAN
PROJECT
OSO FLACO CREEK REMEDIATION PROJECT
PROJECT NO
4124-19
SHEET NO
P-4
7 OF 7
SCAN DATE
2021-03-10
COASTAL SAN LUIS RESOURCE CONSERVATION DISTRICT
1203 Main St. Suite B
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