Cayucos Sustainable Water Project
Environmental Report

Prepared for:

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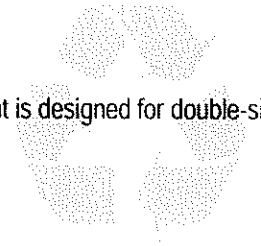
April 2017



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Acronyms and Abbreviations

Abbreviation	Term
AADF	average annual daily flow
AB	Assembly Bill
AFY	acre feet per year
APCD	San Luis Obispo County Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor Parcel Number
APS	auxiliary power system
ATC	Authority to Construct
Blvd.	boulevard
BMPs	Best Management Practices (BMPs)
BOD	Biological Oxygen Demand
Cal/OSHA	California Division of Occupational Safety and Health
CAN-17	calcium ammonium nitrate
CBC	California Building Code
CCC	California Coastal Commission
CCR	California Code of Regulations
CDP	Coastal Development Permit
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CRLF	California red-legged frog
CSA	County Service Area 10
CSD	Cayucos Sanitary District
CSWP	Cayucos Sustainable Water Project
CT	contact time
CUP	Conditional Use Permit
cy	cubic yards
CZMA	Coastal Zone Management Act
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
EPC	Erosion Control Plan
ESA	Federal Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
FIRMs	Flood Insurance Rate Maps
ft	feet
GIS	Geographic Information System

HDD	horizontal directional drilling
LAFCo	Local Agency Formation Commission
LCP	Local Coastal Program
LESA	Land Use Site Assessment
LUO	Land Use Ordinance
MBCSD WWTP	Morro Bay Cayucos Sanitary District Wastewater Treatment Plant
MBR	membrane bioreactor
MGD	millions of gallons per day
mg/L	milligrams per liter
mph	miles per hour
MPN	most probable number
NAHC	Native American Heritage Commission
NCAP	North County Area Plan
NEPA	National Environmental Policy Act
NIOSH	National Institute for Occupational Safety and Health
NOA	Naturally Occurring Asbestos
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
PTO	Permit to Operate
RO	reverse osmosis
RWQCB	Central Coast Regional Water Quality Control Board
sf	square feet
SLOAPCD	San Luis Obispo County Air Pollution Control District
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
TSS	total suspended solids
U.S.C.	United States Code
USDA	United States Department of Agriculture
UV	ultraviolet
WDR	Waste Discharge Requirement
WRRF	Water Resource Recovery Facility
WWTP	wastewater treatment plant

1 INTRODUCTION

The following Environmental Report has been prepared for the Cayucos Sustainable Water Project (CSWP) in accordance with the Environmental Policies and Procedures of the United States Department of Agriculture (USDA) contained in 7 Code of Federal Regulations (CFR) Part 1970. The Cayucos Sanitary District (applicant) is seeking funding from USDA Rural Development under their Water and Waste Disposal Loan & Grant Program to construct a new Water Resource Recovery Facility (WRRF) and related conveyance infrastructure. The CSD is requesting that the CSWP be considered for a Categorical Exclusion (CE) pursuant to the National Environmental Policy Act of 1969, as amended (NEPA) (42 U.S.C. 4321, *et seq.*), the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), and pursuant to USDA regulations contained in 7 CFR 1970 Subpart B. Specifically, this Environmental Report documents that the CSWP would qualify as a class of action described in 7 CFR Section 1970.54 (Categorical Exclusion Involving Small-scale Development), would not involve extraordinary circumstances pursuant to 7 CFR Section 1970.52, would not individually or cumulatively have a significant effect on the human environment, and would not be connected to other actions with potentially significant impacts on the human environment. This document also incorporates by reference, the Environmental Impact Report (EIR) prepared for the project pursuant to the California Environmental Quality Act (CEQA) (CSD 2016) ("EIR") (State Clearinghouse No. 2016041078).

In this Environmental Report, the terms "significant" or "significantly" are based upon the definition in NEPA which requires consideration of both context and intensity of the effect as follows (40 CFR 1508.27):

> *"Context: This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.*
>
> *Intensity: This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:*

1. *Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.*
2. *The degree to which the proposed action affects public health or safety.*
3. *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*
4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*
5. *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*
6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*
7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.*
8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*
9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*
10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment."*

Site Location and Project Scope

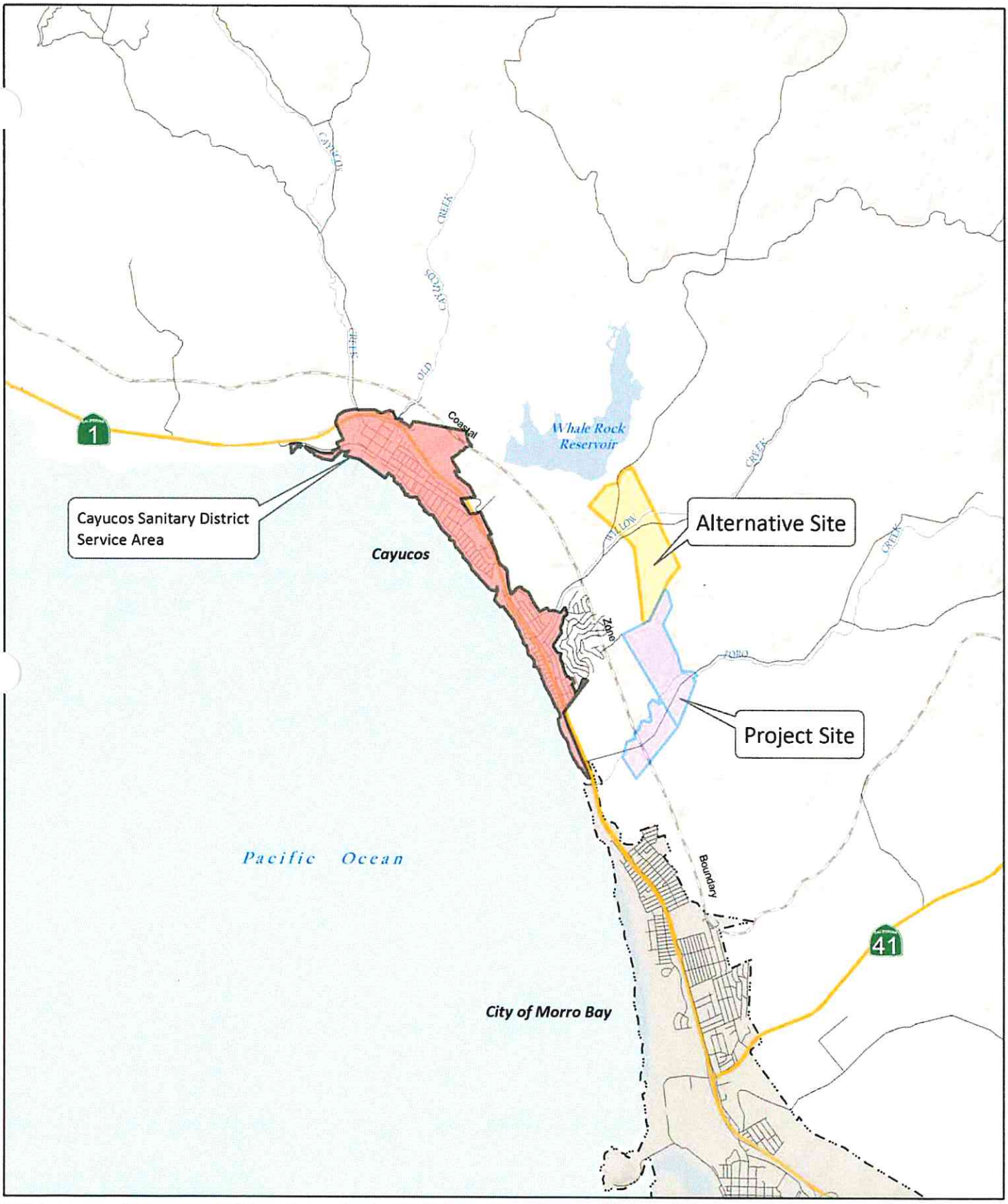
The Proposed Action involves the construction of a WRRF in the Toro Creek Valley, a designated Rural Area by San Luis Obispo County, on Toro Creek Road approximately 0.75 miles inland from State Route 1 in Cayucos. The site in located within portions of two lots owned and operated by CSD: Lot 8 (APN 073-092-034) (76 acres) and Lot 10 (145 acres) (a portion of APN 073-092-050). Lot 10 is part of a Lot Line Adjustment that was recorded in August 2016. Map I-1 shows the CSD service boundary and the location of the Proposed Action.

CSD would create a public lot within the parent parcels of approximately 8 acres for a WRRF and solar array as shown on Map I-1. The CSD will apply for a public lot pursuant to Section 21.02.010(a)(9) of the County of San Luis Obispo's Real Property Division Ordinance and Government Code Section 66428(a)(2). These sections exempt land conveyed to or from a public entity from the requirements of a parcel or tract map. The public lot would be sought as part of a Conditional Use Permit application for the project processed through the County of San Luis Obispo.

The CSWP includes proposed infrastructure, pipelines and appurtenances for influent, effluent, recycled water and processed discharge water to be installed within public rights-of-way including but not limited to Toro Creek Road, State Route 1, Ocean Blvd., Main Street in Morro Bay, and Atascadero Road / Highway 41 in Morro Bay (Figure 2), totaling 1.62 acres of disturbance.

CSWP Phase 2 involves construction of a conveyance pipeline for advanced treated water to the County Service Area (CSA) 10 Water Treatment Facility located on Cabrillo Street in Cayucos. Phase 2 is limited to construction of the pipeline only. Then, at some point in the future when direct potable reuse regulations are established and an additional water source is determined by the community water purveyors as advantageous, such as for a drought buffer, advanced treated water will be conveyed the CSA 10 Water Treatment Facility (Map I-2).

The Proposed Action would disturb a total of 9.62 acres, would only add traffic associated with the commute of 6 employees to and from the WRRF and 3 truck deliveries to and from the WRRF per week, and would not create a new, or involve the relocation of, the ocean outfall for wastewater discharges from the Cayucos community. Therefore, the Proposed Action would meet the criteria for a "small-scale site specific development" pursuant to 7 CFR Section 1970.54(a). Acreages of disturbance include Phase 2, however, CSD is currently not requesting funding for Phase 2, therefore, it is not included in the Proposed Action subject to NEPA.



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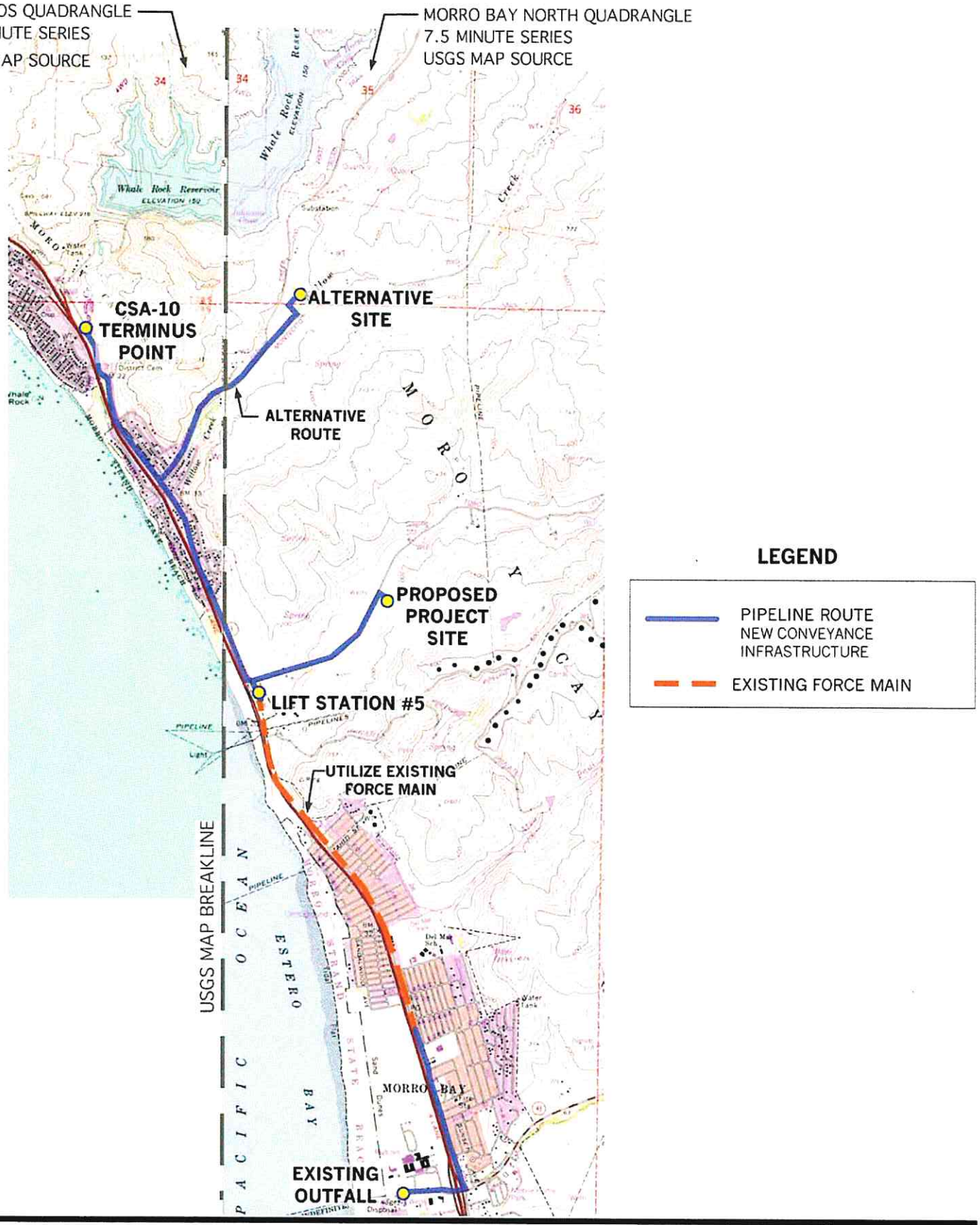
Cayucos Sustainable Water Project

PROJECT VICINITY

North

MAP I-1



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PIPELINE INFRASTRUCTURE

North

MAP I-2

Purpose and Need

The CSD was formed in 1942 to provide sewer service to the unincorporated community of Cayucos. In 1954, the CSD constructed a sewer system and treatment plant (the Morro Bay Cayucos Sanitary District Waste Water Treatment Plant [MBCSD WWTP]) under a joint powers agreement with the Morro Sanitary District (now City of Morro Bay). The plant ultimately was reconstructed in 1984 under a joint powers agreement. The CSD owns and holds capacity rights to 35 percent of the ocean outfall and sewage treatment plant and 40 percent of the land with the remainder being owned by the City of Morro Bay. The District collects wastewater from 2,657 service connections and transports it to the treatment plant in Morro Bay which has a peak dry-weather flow capacity of 2.36 million gallons. As of 2015, the District generates approximately 0.274 million gallons per day (MGD) of wastewater, or about 33.2 percent of its 0.826 MGD gallon entitlement. All of the treated effluent is discharged through the Morro Bay outfall.

The CSD and the City of Morro Bay have worked collaboratively to upgrade the treatment processes and improve the discharged water quality at the shared MBCSD WWTP for nearly a decade. The purpose of the upgrade to the MBCSD WWTP was to improve discharged water quality to at least full secondary treatment, thus eliminating the need for a Clean Water Act Section 301(h) modified discharge permit based on a Settlement Agreement with the Central Coast Regional Water Quality Control Board (RWQCB). The 2005 Settlement Agreement provided a nine and one half year timeline for the completion of the upgrades at the MBCSD WWTP. At their January 10, 2013 meeting, the California Coastal Commission (CCC) determined that upgrading and maintaining wastewater facilities at the location of the existing MBCSD WWTP would violate the Coastal Act, effectively mandating the abandonment of the CSD's historic wastewater treatment infrastructure.

Because upgrading the existing MBCSD WWTP was no longer a viable option, the CSD Board determined at its April 30, 2015 meeting that the best way to secure the community's water future would be the pursuit of development of a stand-alone WRRF, the CSWP. The mission of this project is to deliver a sustainable and cost effective water resource recovery system for the community of Cayucos within the streamlined schedule necessitated by the status of the current MBCSD WWTP National Pollutant Discharge Elimination System (NPDES) permit and the RWQCB Settlement Agreement.

The Project site was selected by the CSD Board of Directors from five candidate sites as superior in meeting the Purpose and Need, and for environmental suitability. The Project Vision, Mission, Objectives Performance Measures and Guiding Principles were adopted by the CSD Board of Directors in a Project Charter adopted on July 16, 2015 (refer to Appendix A of the EIR, incorporated herein by reference), and are summarized as follows:

- Provide the community of Cayucos with efficient, reliable and adaptable wastewater treatment, while producing a high-quality water supply to benefit the community.
- Enable the community to put the wastewater that is currently discharged to the ocean to beneficial use.
- Provide the community with sustainable water, ownership of facilities and local governance.
- Deliver a sustainable and cost effective water resource recovery system for the community of Cayucos within a streamlined schedule.
- Optimize capital investment and life cycle cost.
- Maximize value for the ratepayers' investment.
- Develop a water resource recovery system that will benefit future generations.
- Obtain grants and low-interest loans to reduce the financial burden on the community.
- Identify a facility location that benefits the community of Cayucos.
- Enhance the community's long-term water supply.

Characteristics of the Project

WATER RESOURCE RECOVERY FACILITY (WRRF)

The WRRF will be accessed from Toro Creek Road, a public road and is shown on Maps I-3 through I-5.

The build-out average annual daily flow (AADF) capacity is expected to be in the range of 0.30 to 0.40 MGD. Peak hour and maximum daily flows resulting from peak season dry weather events and wet weather events will be equalized in an off-line equalization basin to reduce the required size of equipment for downstream processes.

The project is designed to serve the existing and build-out population within the CSD service boundary. In the long term, expansion of capacity may be required to meet changing demographics. Due to the nature of the proposed processing technology, the footprint of the proposed WRRF would be likely to be able to accommodate, as of yet, unforeseen increased flows without a dramatic spatial expansion of the facility.

FACILITY PROCESSES AND TECHNOLOGY

As a fundamental component of the project, influent will be treated to disinfected tertiary standards, with a portion available for recycled water irrigation, and remaining treated effluent discharged to the existing Morro Bay outfall. Future phases will direct the tertiary treated effluent stream through advanced treatment processes for potable reuse through the basic components below:

Process Control
- Equalization Basin

Preliminary Treatment
- Coarse/Bar screens
- Grit removal

Secondary Treatment
- Fine screens
- Modified Ludzack-Ettinger Activated Sludge Process with Membrane Bioreactor (MBR)

Tertiary Treatment
- UV or chlorine disinfection

Advanced Treatment
- Reverse Osmosis (RO)
- UV/Advanced Oxidation disinfection
- Treated water storage and pumping

Solids Handling
- Stabilization/Digestion
- Thickening
- Dewatering
- Drying

Recycled Water System
- On-site storage tank
- Pump station

In addition to treatment process infrastructure, the WRRF site will include supporting facilities necessary to operate, maintain, secure and preserve the site, as shown on Maps I-4 and I-5, including an emergency backup power supply, security fence, domestic and non-potable (recycled water storage tanks), office building and laboratory, landscape screening, stormwater conveyances and a spill containment basin.

COLLECTION AND CONVEYANCE INFRASTRUCTURE

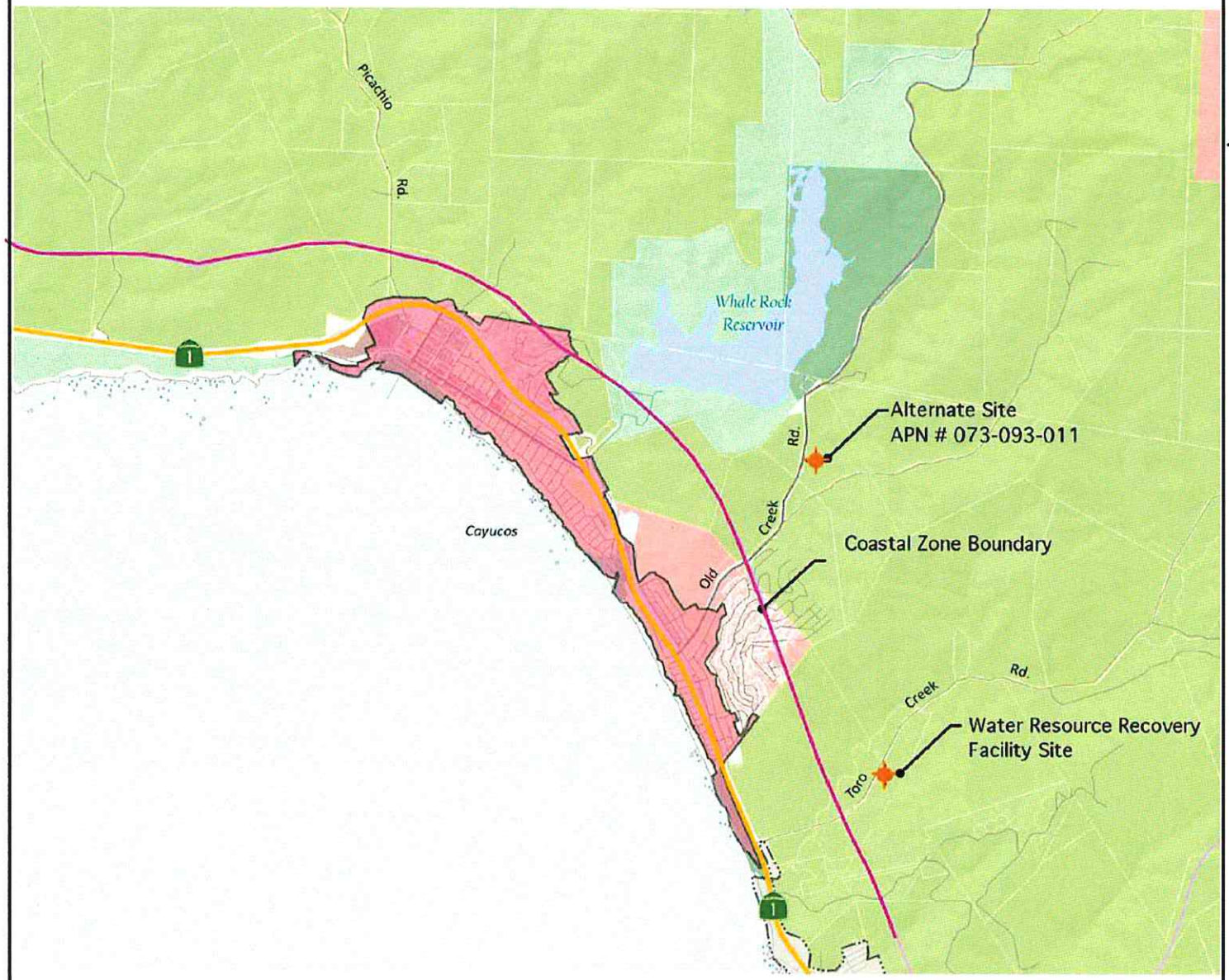
The overall alignment corridors for the CSWP conveyance pipelines are depicted on Map I-2. Detailed maps of the routes on aerial imagery are shown in Appendix A on a zoomed in scale. The new pipeline segments consist of the following and as discussed in more detail below: 1) influent to the WRRF, 2) effluent to Lift Station 5, 3) effluent to the existing outfall, and 4) the Phase 2 recycled water pipeline to the CSA 10 site (not a part of the Proposed Action).

Influent to WRRF: Construction of a force main from existing Lift Station 5 at Toro Creek Road and State Route 1 to the WRRF is approximately 4,200 linear feet of pipe along Toro Creek Road. Modifications to Lift Station 5 will also be constructed. The pipeline will cross Toro Creek at the existing bridge, but will not be attached to that bridge.

Effluent to Lift Station 5: From a pump station at the WRRF, a pipeline will run back down Toro Creek Road parallel to the influent line and will similarly cross Toro Creek at the existing bridge, but will not be attached to it.

Effluent to Existing Outfall: From Lift Station 5, treated wastewater will be conveyed by an existing force main in Caltrans right-of-way and Main Street in Morro Bay to the intersection of Island Street and Main Street where a new force main, or modifications to the existing gravity pipeline, will be constructed from that point and then down Main Street to Highway 41 /Atascadero Road to the existing Morro Bay Cayucos WWTP. For the purposes of impact analysis, it is assumed that new force main would be required and would be installed within the existing, previously disturbed, trench. In addition, a terminal lift station, and up to 500 feet of new force main, will be constructed at the end of the existing Cayucos Interceptor to lift the treated effluent into the existing ocean outfall. The tie-in will occur within the existing facility property, or within the right-of-way of Atascadero Road. The exact location and configuration will be determined in conjunction with the City of Morro Bay. The CSD has a 35 percent interest in the outfall capacity that will accommodate this discharge.

Recycled Water to CSA 10 Site (Phase 2 - Not Part of Proposed Action): In Phase 2 of the Proposed Action, a pipeline will be constructed to the CSA 10 Water Treatment Facility on Cabrillo in Cayucos. At some point in the future when direct potable reuse regulations are established and an additional water source is determined by the community water purveyors as advantageous, such as for a drought buffer, advanced treated water will be conveyed to the CSA 10 Water Treatment Facility. The routes would run west on Toro Creek Road then north along State Route 1 within a CSD easement in the right-of-way of Chaney Street. The pipeline will then run along Ocean Blvd., past the cemetery on Cabrillo Ave., crossing the existing footbridge over Old Creek, to the CSA 10 site. The pipeline will be capped at that location.



Cayucos Sustainable Water Project

Cayucos Sanitary District Boundaries

Coastal Zone Boundary

General Plan Land Use Designations

- Agriculture
- Commercial Retail
- Commercial Service
- Industrial
- Multi-Land Use Category
- Office Professional
- Open Space
- Public Facility
- Recreation
- Rural Lands
- Residential Multi-Family
- Residential Rural
- Residential Suburban
- Residential Single Family

Area of Map

0 0.25 0.5 Miles

SAN LUIS OBISPO COUNTY LAND USE DESIGNATIONS

MAP I-3

NOTES:
-Refer to Map I-5 for identification of various buildings and compontents

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Proposed Project

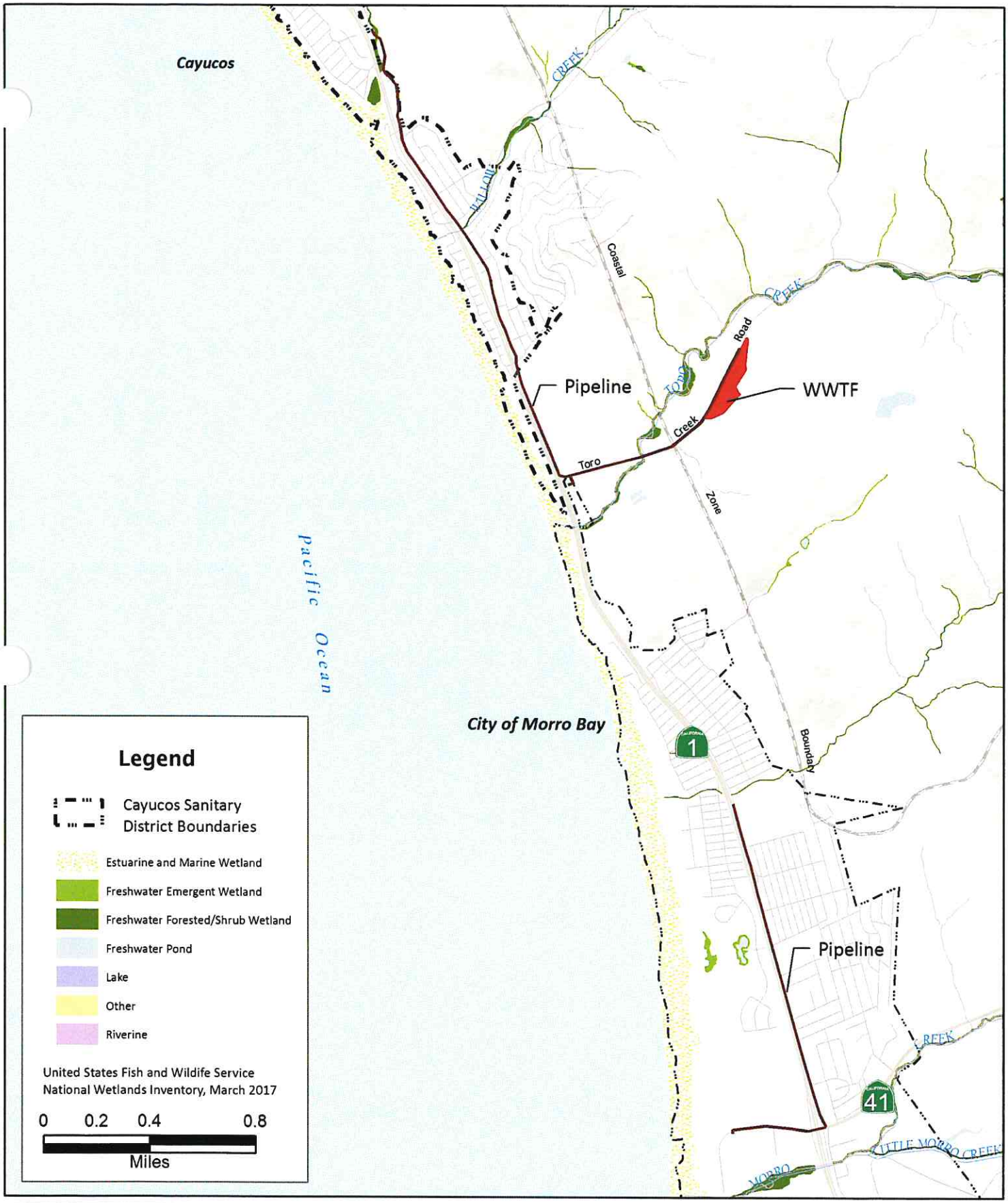
Legend:

- Limit of WRRF grading
- Solar Array
- Landscape Screen

0 50' 100'
Scale

NORTH

MAP
I-4



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USFWS NATIONAL WETLANDS INVENTORY

NORTH

FIGURE 7

Tertiary Treated Water for Agricultural Irrigation

The WRRF will create disinfected tertiary recycled (non-potable) water for agricultural irrigation. It is anticipated that agricultural lands adjoining or nearby the WRRF could have access to this irrigation water. The project will implement an agreement with yet to be identified farmers/landowners to provide this water to irrigate cropland.

The WRRF is anticipated to initially allocate up to 80 acre-feet per year (AFY) of tertiary treated water to be made available for agriculture, but has the potential to allocate all treated wastewater from the facility. The actual amount of tertiary treated water that will be used for agriculture is dependent upon future negotiations with farmers as lessees or landowners and cannot be quantified at this time because it is dependent on crop, location, infrastructure needs and cost.

Disinfected tertiary recycled water is filtered and disinfected wastewater that meets the following criteria:

A) The filtered wastewater has been disinfected by either:
   1. A chlorine disinfection process following filtration that provides a contact time value (CT) (the product of total chlorine residual and modal contact time measured at the same point) of not less than 450 milligram-minutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
   2. A disinfection process that, when combined with the filtration process, has been demonstrated to inactivate and/or remove 99.999 percent of the plaque forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to disinfection as polio virus may be used for purposes of the demonstration.

B) The median concentration of total coliform bacteria measured in the disinfected effluent does not exceed a Most Probably Number (MPN) of 2.2 per 100 milliliters utilizing the bacteriological results of the last seven days for which analyses have been completed and the number of total coliform bacteria does not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30.

C) Tertiary treated water will comply with:
   - CFR Title 22 operational and on-site use requirements
   - Central Coast Basin Plan Water Quality Objectives
   - Central Coast Regional Water Quality Control Board Master Reclamation Permit

The pipeline to irrigation customers within Toro Creek Valley is not known at this time. Therefore, the pipeline infrastructure will be contained with the WRRF facility footprint and would extend only to the boundary of the facility. On-site storage facility for irrigation water storage will be a tank at approximately 300,000 gallons.

WRRF Operations

A process flow diagram for the WRRF is shown in Appendix B.

Storage of Materials: Chemicals will be added throughout the wastewater treatment process to provide an alkalinity source, control odors, improve sludge conditioning, disinfect the water, and clean the MBR membranes.

The secondary treatment process will require chemicals to adjust the water chemistry and chemicals to clean the MBRs. Alkalinity chemicals such as sodium hydroxide or magnesium hydroxide will be used during daily operations to stabilize the pH in the aeration tanks of the secondary treatment process. The alkalinity chemical will be stored in two identical double-walled tanks and delivered to the aeration basins through a peristaltic pump system. Citric acid, sodium hypochlorite, sodium hydroxide or similar cleaning chemicals will be used intermittently to perform preventive maintenance cleanings on the MBR units by removing organic and inorganic matter. Similarly, these chemicals would be stored in a chemical drum or a double walled plastic tote when it is not in use.

The District currently adds calcium ammonium nitrate (CAN-17) at Lift Station 5 to control odors from the raw influent wastewater; the use of CAN-17 at Lift Station 5 is assumed to continue for the purposes of the environmental impact analysis for the project. CAN-17 is currently stored at Lift Station 5 in a 55-gallon drum.

The on-site solids handling processes will require a water-soluble polymer to be used as a flocculant for conditioning of the sludge stream. Polymers would be delivered in double-walled plastic totes from the manufacturer and will be stored inside a building near the sludge thickening and dewatering equipment. Polymers are introduced to the solids handling process through a metering pump.

The disinfection process associated with Phase 1 of the Proposed Action will include the use of sodium hypochlorite for chlorine disinfection and sodium bisulfite for de-chlorination. Both of these chemicals will be stored outdoors under a shade structure in double-walled plastic tanks. These chemicals would be introduced to the disinfection process continuously through a peristaltic pump system. In Phase 2 of the CSWP, the disinfection processes will be upgraded to advanced oxidation and disinfection which requires hydrogen peroxide for oxidation of pathogens.
Risks associated with handling these chemicals will be managed by using concrete secondary containment structures at chemical storage locations, providing adequate access and egress space for chemical delivery trucks, developing hazardous material business response plans, and installing eye-wash and shower stations at each chemical storage and feed location.

Disposal of Biosolids: The biosolids produced at the new treatment facility would be considered CFR 40 Part 503 Sub-Class B biosolids. The biosolids will be transported to private composting in Santa Barbara or Kern County for beneficial reuse. Alternatively, the biosolids will be transported to Kettleman Hills or McKittrick Landfill for disposal. The volume of biosolids exported from the WRRF would be less than two 10 cubic yard capacity trucks per week.

Effluent to Existing Outfall

Discharge Permit Status: The existing MBCSD WWTF outfall operates under a NPDES permit originally issued for a five-year term in 2009 (RWQCB Central Coast Region order # R3-2008-0065, NPDES No. CA0047881). This permit expired in 2014 and the RWQCB has placed the renewal application for the permit on administrative hold while the City and CSD pursue plans for new facilities.

Daily Discharge Volume: During wet periods, or when there is no demand for tertiary treated recycled water, the AADF will be discharged to the outfall. This is anticipated to be approximately 350 AFY.

With production of recycled water for the tertiary irrigation, the estimated anticipated initial discharge to the outfall will be approximately 270 AFY, and could be reduced to 75 AFY if all treated wastewater is utilized as recycled water for irrigation.

At the time that community water purveyors determine recycled water is advantageous to be developed as a water source, the estimated anticipated discharge to the outfall will be reduced to approximately 75 AFY.

Water Quality: Water will be treated to disinfected tertiary standards and will meet anticipated NPDES Permit discharge limitations listed in the table below.

Table 1 Water Quality Parameters

Parameter	Biological Oxygen Demand (BOD)	Total Suspended Solids (TSS)
Average Monthly (mg/L)	30	30
Average Weekly (mg/L)	45	45
30-Day Average Percent Removal (%)	> 85%	> 85%
Instantaneous Maximum (mg/L)	50	50
30-Day Average Percent Removal (%)	85	85

Reverse Osmosis (RO) Discharge Disposal: Daily discharge of RO production water will be blended with tertiary treated effluent discharge. Anticipated discharge to the outfall will be 49 acre-feet per year. Discharge from the RO membrane is anticipated to meet future Ocean Plan amendment requirements and RWQCB discharge permit requirements. Increased Total Dissolved Solids (TDS)/salt concentrations in the brine stream would still be far below seawater concentrations.

PHASE 2 RECYCLED WATER PIPELINE

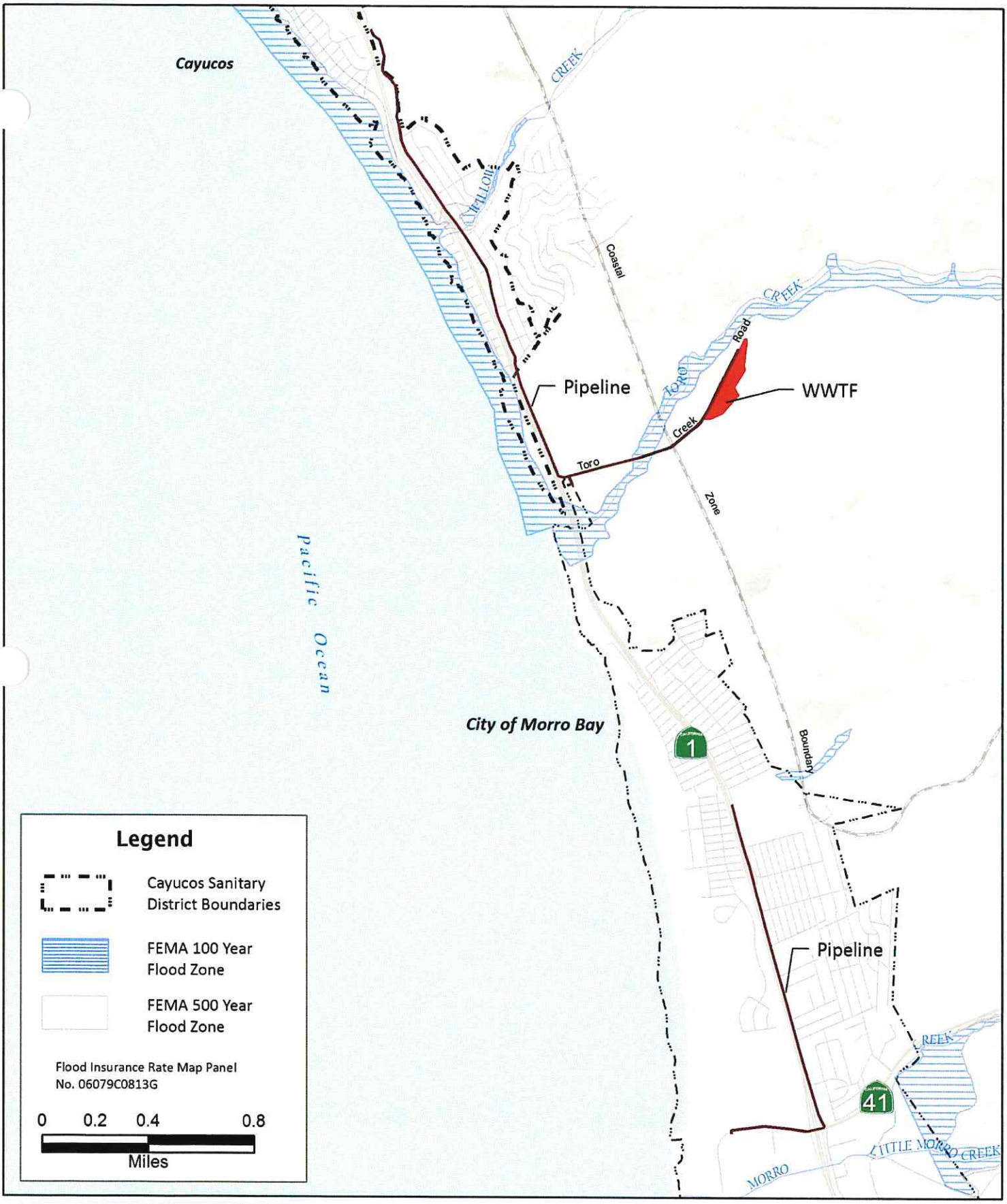
Included in Phase 2, is the installation of a pipeline that could be used to convey advanced treated water to the CSA 10 Water Treatment Facility for direct potable reuse. Phase 2 is anticipated to be initiated by the community water purveyor(s) at the point in time when direct potable reuse regulations are established and that additional water resources for the community are determined to be needed. The Proposed Action does not include addition of a potable water supply to the community because the CSD is not a water purveyor, nor does it include construction of the recycled water line to the community of Cayucos.

Construction Activities

The anticipated construction duration for the WRRF and associated conveyance infrastructure is 18 months. The estimated earthwork volume required to construct the WRRF and solar array is 12,000 cubic yards (cy), and would be balanced at the WRRF site. The estimated earthwork volume required for the conveyance infrastructure improvements would be 7,857 cy that would be balanced onsite as well.

The staging area for construction would be within the 8-acre WRRF site. All temporary construction staging Best Management Practices (BMPs) required by the County General Permit, the project Stormwater Pollution Prevention Plan (SWPPP) and grading codes, will be employed. Long-term measures will be identified in the final grading and drainage plan / stormwater control plan for the project to fully comply with all applicable standards. These measures include revegetation, and use of stormwater basins, bioswales and infiltration areas, as applicable.

The WRRF site is near a drainage that is considered jurisdictional waters of the United States subject to protection under Sections 404 and 401 of the Clean Water Act and Section 1600 of the California Fish and Game Code. The location of this drainage is shown on Exhibit 1. Construction and operation of the Proposed Action will completely avoid disturbance of this drainage. Implementation of erosion control measures during construction will also ensure no indirect impacts to this drainage.



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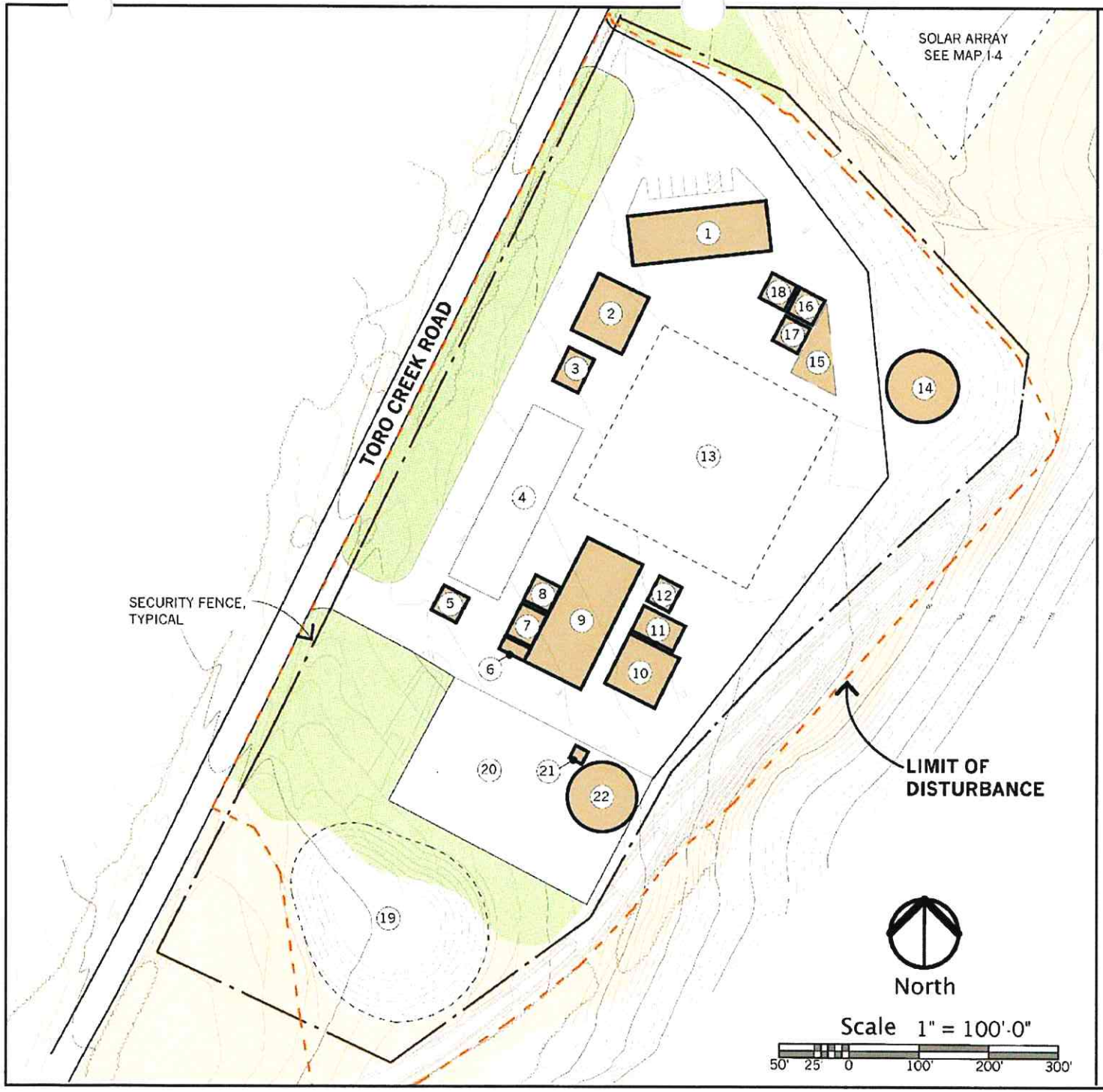
Cayucos Sustainable Water Project

FEMA FLOODPLAINS

NORTH

FIGURE 6



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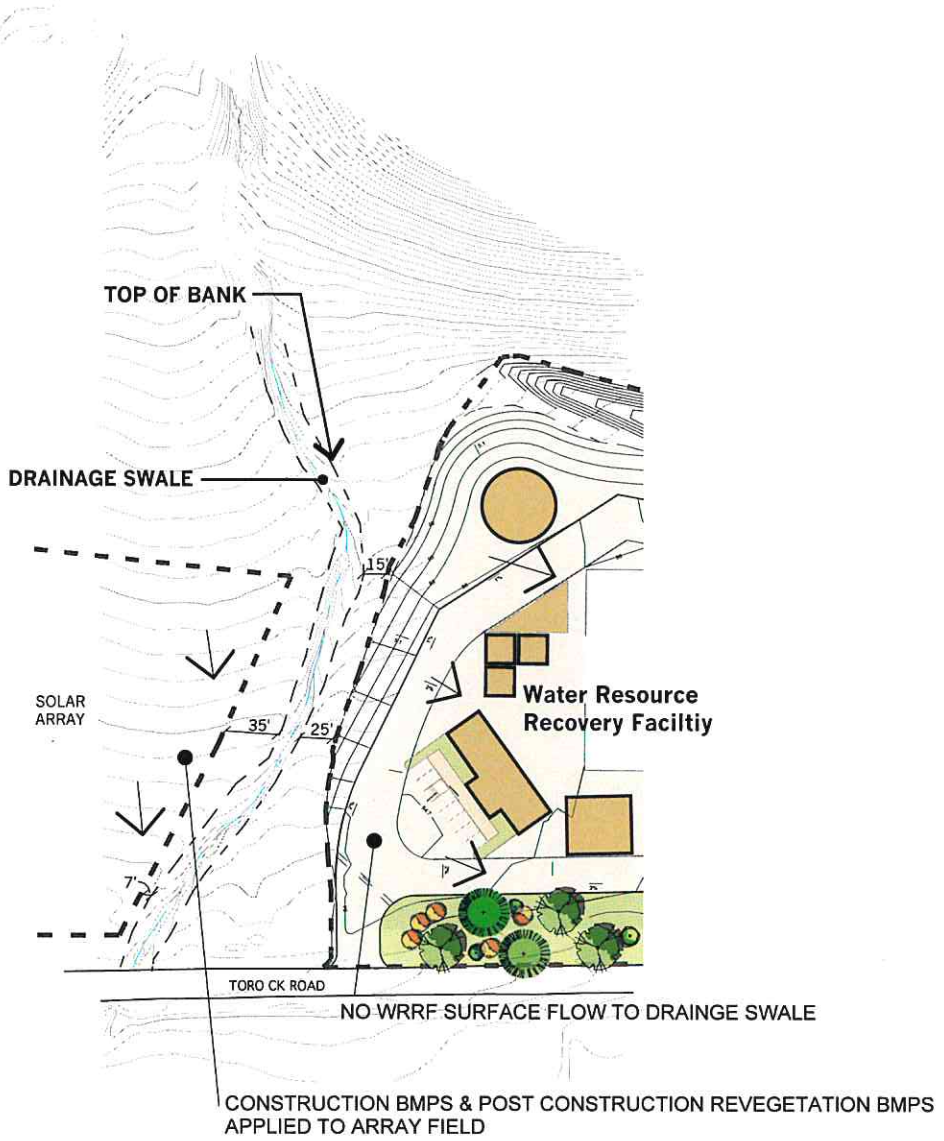
Cayucos Sustainable Water Project

Preliminary Facility Layout Plan

Key:

1. Office & Laboratory
2. Maintenance
3. Standby generator/electrical room
4. Chlorine contact channel
5. Effluent/recycled water distribution pump station
6. Chemical storage
7. Membrane cleaning tank
8. Blower Building
9. Aeration/Membrane Tanks
10. Solids Handling
11. Odor Control
12. Aerobic Digesters
13. Equalization Basin
14. Potable Water Tank
15. Wood chips
16. Grit Chamber
17. Fine screen
18. Coarse screen
19. Emergency Containment Basin
20. Advanced Treatment Facility
21. Recycled Water Distribution
22. Recycled Water Storage

MAP I-5



CAYUCOS SANITARY DISTRICT
805-995-3290

Cayucos Sustainable Water Project

Proposed Project
Relation to drainage swale

Legend:

- LIMIT OF GRADING DISTURBANCE
- FLOW LINE
- DRAINAGE DIRECTION

0 50' 100'
Scale

NORTH

EXHIBIT 01

USDA _EXHIBIT LAST MODIFIED: FEBRUARY 15, 2014

Construction within public rights-of-way would be subject to encroachment permit requirements issued by the County of San Luis Obispo, Caltrans, and the City of Morro Bay.

Impact Avoidance and Minimization Measures

The following impact avoidance and minimization measures will be implemented by CSD as part of the Proposed Action to ensure that the CSWP would have no significant effect on the environment:

GEO-1: Design-Level Geotechnical Investigation and Report: a geotechnical design investigation should be performed to provide final recommendations and geotechnical design criteria for specific project components, such as structures, foundations, pipelines, pump stations, loading conditions, excavations, grading, dewatering, drainage and other site work. The geotechnical design investigation should include additional field exploration for specific structures, and include testing and analyses as needed to provide a basis for design criteria and construction recommendations in accordance with local (County of San Luis Obispo) regulations and the applicable California Building Code (CBC).

As part of the geotechnical design investigation for the Project, creek crossings for pipelines should be investigated and evaluated with respect to the methods of crossings. If horizontal directional drilling methods (HDD) are proposed, then HDD feasibility investigations should be performed for each location where that method is being considered. The geotechnical design report shall include geotechnical design criteria for creek crossings, which may include recommendations for pipeline burial depths, methods of crossing, trench or trenchless design parameters, and lateral setbacks. Recommendations for specific crossings shall be incorporated into the Project plans and specifications prior to construction of the pipeline.

GEO-2A: The geotechnical design investigation for the project (Measure GEO-1) should include appropriate geologic fault evaluations of the Cambria fault to develop project-specific design parameters for pipeline sections crossing the fault. The fault evaluations should be directed towards, but not necessarily be limited to, defining the location and width of the fault zone at the pipeline-fault crossings. Since the fault traces are concealed beneath young geologic deposits, the fault zones may be difficult to define with precision. Consequently, fault zone widths should incorporate conservative assumptions for pipeline design.

Pipeline crossings of fault traces shall be designed to accommodate potential flexure and horizontal and vertical offsets based on the results of the geologic fault evaluations. Fault rupture mitigation strategies for pipelines may include measures such as flexible connections, gravel trench backfill, double lined pipes, strengthened pipes, automatic shutoff valves and similar measures to prevent the release of product to the environment.

GEO-3: Project structures should be designed to resist lateral forces generated by earthquake shaking in accordance with the current building code, State pipeline safety standards and applicable design practice. The design-level geotechnical report (Measure GEO-1) should include recommendations for seismic data for design that may be updated for the new code requirements, additional subsurface information, or further site-specific analyses. Appropriate seismic ground motion parameters should be estimated and incorporated into project design by the project engineer.

GEO-4: The design-level geotechnical report (Measure GEO-1) should include evaluations of liquefaction potential and estimated liquefaction-induced settlement based on field exploration, testing and analysis of site conditions for final project components (WRRF and pipelines). The potential effects of other seismically induced ground failures should also be evaluated, including lateral spreading and seismic densification. Engineering design measures should be provided where estimated ground deformations exceed typical foundation and structural design parameters.

The liquefaction, lateral spreading and seismic settlement evaluations should be conducted in accordance with guidelines published by the California Geologic Survey (formerly the California Division of Mines and Geology) and relevant local and professional standards. At a minimum, the liquefaction hazard evaluation and mitigation

study should be undertaken in a manner consistent with the Guidelines for Evaluation and Mitigation of Seismic Hazards in California, Chapter 6, Analysis of Liquefaction Hazards (CGS Special Publication 117A, 2008).

GEO-5: The design-level geotechnical report (Measure GEO-1) should include evaluations of landsliding, creek bank instability and other types of slope instability settlement based on field exploration, testing and analysis of site conditions for final project components (WRRF and pipelines). The potential impact of slope instability on the construction and operation of the WRRF should be evaluated as part of the geotechnical design investigation and report (Measure GEO-1). Mitigation measures to reduce the potential for damage due to slope movement should be developed for the depths and types of slope movements that may impact the pipelines at the locations identified in the landslide evaluations. It is anticipated that a variety of engineering design measures could be successfully constructed or implemented to reduce the probability of adverse impacts due to slope movement at identified slope hazard sites.

GEO-6: An Erosion Control Plan (ECP), including elements of a Storm Water Pollution Prevention Plan (SWPPP), should be prepared by a geotechnical or civil engineer, consistent also with Measure WQ-3. The ECP and SWPPP would describe measures intended to reduce erosion and deposition in to local creeks and the Pacific Ocean.

GEO-7: Testing of samples in a geotechnical laboratory is the standard method of quantifying the expansibility of materials, and should be performed as part of design-level geotechnical studies for the selected WRRF site and pipeline routes (Measure GEO-1). If expansive materials are identified, then appropriate design and construction measures should be provided to mitigate the adverse effects. The design-level geotechnical investigation should provide specific recommendations to address expansive soil conditions for the design of foundations, flatwork, pavement, pipelines and other site work.

GEO-8: Mitigation strategies for infrastructure located within tsunami inundation zones shall be implemented and include, as determined applicable, measures such as flexible connections, double lined pipes, strengthened pipes, automatic shutoff valves and similar measures to prevent the release of wastewater and treated water to the environment.

AG-1: Prior to the issuance of grading permits, the Cayucos Sanitary District shall provide evidence to the County Department of Planning and Building that a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism has been granted in perpetuity to the County or a qualifying entity approved by the County Agricultural Commissioner (or designee). The easement shall provide conservation acreage at a ratio of 2:1 for direct project impacts. The area conserved shall be shall be of a quality that is reasonably similar to that of farmland within the project limits (as determined by the County Agricultural Commissioner or designee).

BIO-1: Within one week of ground disturbance or vegetation removal activities, if work occurs between March 1 and August 31, nesting bird surveys shall be conducted. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. Occupied nests of special status bird species shall be mapped using GPS or survey equipment and submitted in monitoring reports. If nesting birds are located, no construction activities shall occur within 100 feet of nests (or other setback distance determined by a qualified ornithologist) until chicks are fledged. Construction activities shall observe a 300-foot buffer for active raptor nests. Occupied nests of special status bird species shall be monitored every two weeks to document nest success and check for compliance with buffer zones.

BIO-2: Limits of grading shall be clearly delineated in the field prior to initiation of construction activities to demonstrate avoidance in impacting the area identified in the Biological Technical Report as habitat for club-haired mariposa lily.

BIO-3: To mitigate adverse impacts to potentially present special status reptiles and amphibians western pond turtle, foothill yellow-legged frog, coast range newt, and two-striped garter snake, in addition to Mitigation Measure BIO-7, the following shall be implemented:

- A pre-construction survey would be conducted within 48 hours prior to starting work in or within 50 feet of habitats likely to support sensitive reptiles and amphibians such as seasonal drainages and riparian. The survey would be conducted by a qualified biologist approved to relocate sensitive species should they occur. If sensitive reptile or amphibian species are located during the pre-construction survey, a biologist would monitor ground-breaking work conducted within 50 feet of habitat.

- Qualified biologists will brief all project personnel prior to participating in construction activities. At a minimum, the briefing will include a description of the project components and techniques, a description of the listed species occurring in the project area, and the general and specific measures and restrictions to protect the species during implementation of the project.

BIO-4: To mitigate adverse impacts to potentially present California red-legged frog (CRLF), the following shall be implemented:

- Qualified biologists will brief all project personnel prior to participating in construction activities. At a minimum, the briefing will include a description of the project components and techniques, a description of the listed species occurring in the project area, and the general and specific measures and restrictions to protect the species during implementation of the project.

- Pre-construction surveys for CRLF will be conducted prior to ground disturbance.

- Prior to start of construction activities, install exclusionary silt fencing to adequately exclude CRLF from the Project area during active construction. Exclusion fences will be checked daily by a biological monitor. The biological monitor(s) shall be qualified to move any CRLF to the nearest suitable habitat away from the Project area as needed.

- USFWS-approved biological monitor(s) shall document compliance with all best practices and environmental compliance items for the Project. Prior to the start of construction activities in the riparian zone each day, monitor(s) will survey the work areas for CRLF, look under parked vehicles and heavy equipment frequently (especially every morning before work starts). The biological monitor(s) shall be qualified to move wildlife, including CRLF, from the Project areas to the nearest suitable habitat outside of the Project area as needed.

BIO-5: To mitigate potential adverse effects to water quality and special status species habitat in project area creeks, in addition to measure described in measure WQ-3 including appropriate best management practices (BMPs) utilized within the construction areas to prevent excess sediment from entering Toro Creek or Willow Creek, Storm Water Pollution Prevention Plan (SWPPP) implementation, and long-term measures identified in the SWPPP, the following additional measures are required:

- During construction of the conveyance pipelines across all creeks, no ground disturbing activities will take place within the riparian corridor or within the top of bank channel.

- The edge of riparian vegetation will be shown on construction plans and boundaries of the work area will be shown on construction plans. Limits of grading will be clearly delineated in the field prior to initiation of construction activities.

- All hazardous materials required to operate and maintain equipment will be properly used in accordance with manufacturer's specifications.

- The contractor will follow an approved spill prevention plan, including procedures to ensure that all equipment is properly maintained and free of leaks and all necessary repairs incorporate proper spill containment.

- Hazardous materials will be properly stored and managed in secured areas located outside riparian corridors.

- Mobile equipment will be staged, repaired, and maintained 300 ft from top of bank of Toro Creek, or on existing paved road surfaces. Fueling of equipment will be conducted in pre-designated areas at least 300 ft from the top of bank drainages, or on existing paved road surfaces. Spill containment materials will be placed around the equipment before refueling. Standing equipment will be outfitted with drip pans and hydrocarbon absorbent pads.

BIO-6: Prior to installation of conveyance structures adjacent to road bridges over Toro Creek, Willow Creek, Old Creek, or Paul Alva Creek, a qualified biologist shall conduct a survey of the bridge to determine if roosting bats are present. If possible, the survey shall be conducted during the non-breeding season (November through March). If a colony of bats is found roosting in any structure, further surveys shall be conducted sufficient to determine the species present and the type of roost (day, night, maternity, etc.). If the bats are not part of an active maternity colony, passive exclusion measures may be implemented with approval from CDFW. November is the best time of the year to exclude bats from a roost because it is after the breeding season and before winter hibernation (not all species hibernate).

BIO-7: To avoid impacts to overwintering monarchs, tree trimming/removal and construction activities that affect eucalyptus trees near or within the overwintering grove shall not be conducted during the overwintering season from October 1 through March 31. If construction activities must be conducted during this period, overwintering monarch surveys shall take place within one week of habitat disturbance. If surveys do not locate clustering monarchs, construction activities may be conducted. If clustering monarchs are located, no construction activities shall occur within 100 feet of the edge of the overwintering grove.

BIO-8: Hazardous materials will be properly stored and managed in secured areas located outside of the Toro Creek riparian corridor.

BIO-9: Mobile equipment will be staged, repaired, and maintained 300 ft from top of bank of Toro Creek, or on existing paved road surfaces. Fueling of equipment will be conducted in pre-designated areas at least 300 ft from the top of bank drainages, or on existing paved road surfaces. Spill containment materials will be placed around the equipment before refueling. Standing equipment will be outfitted with drip pans and hydrocarbon absorbent pads.

BIO-10: Avoid ground disturbing activities during the wet season of the year.

BIO-11: Pre-construction surveys for California red-legged frog (CRLF) will be conducted prior to ground disturbance.

BIO-12: Prior to start of construction activities, install exclusionary silt fencing to adequately exclude CRLF from the Project area during active construction. Exclusion fences will be checked daily by a biological monitor. The biological monitor(s) shall be qualified to move any CRLF to the nearest suitable habitat away from the Project area as needed.

BIO-13: USFWS-approved biological monitor(s) shall document compliance with all best practices and environmental compliance items for the Project. Prior to the start of construction activities in the riparian zone each day, monitor(s) will survey the work areas for CRLF, look under parked vehicles and heavy equipment

frequently (especially every morning before work starts). The biological monitor(s) shall be qualified to move wildlife, including CRLF, from the Project areas to the nearest suitable habitat outside of the Project area as needed.

BIO-14: Qualified biologists will brief all Project personnel prior to participating in construction activities. At a minimum, the briefing will include a description of the Project components and techniques, a description of the listed species occurring in the Project area, and the general and specific measures and restrictions to protect the species during implementation of the Project.

BIO-15: All trash shall be removed from the site daily or secured in a predator-resistant container to avoid attracting predators to the site.

CUL-1: To mitigate potential effects to tribal cultural resources, the CSD shall place some of the portions of parcels 8 and 10 owned by the CSD between Toro Creek Road and Toro Creek in a conservation easement in favor of an appropriate entity to protect and manage the land for agriculture uses only. Additionally, the Cultural Resource Impact Assessment Report shall include a full technical analysis of all artifacts and other cultural remains collected during the Phase II study.

CUL-2: To avoid any adverse effect on CA-SLO-879/H, the proposed pipelines along Toro Creek Road shall be placed only on the north side of the road and shall be directionally drilled under the maximum depth of cultural deposits. Three bore pits shall be installed along the pipeline alignment in previously disturbed areas, where cultural materials are sparse and lack integrity. The exact location of the bore pits and segment to be directionally drilled shall be dictated in the Final Cultural Resources Impact Assessment Report prepared for the project by Applied Earthworks. All work related to pipeline installation along Toro Creek Road shall be monitored by an archaeologist and Native American representatives. If at any point, the pipeline design requirements specified in the Cultural Resources Impact Assessment Report cannot be met, the project shall be halted and San Luis Obispo County and other responsible agencies contacted to determine the next course of action to protect historical or tribal cultural resources in compliance with California and federal law.

WQ-3: The Project will be required to comply with the General Permit including but not limited to compliance with 1) the State General Construction Activity Permit, as most recently modified by the State Water Resources Control Board (SWRCB), and 2) County standards under the Stormwater Ordinance Title 19 chapter 19.09, ensuring that construction-related sediment or other contaminants that could adversely affect receiving water would be reduced to a less-than-significant impact. Compliance with these requirements shall include a plan to construct the spill containment basin as soon as practical in the construction sequence and direct all runoff to that point.

VIS-1: To mitigate short-term impacts on visual resources until planting matures, a final landscaping plan shall be prepared for the project site consistent with the preliminary landscape plan evaluated in the EIR and approved by the County prior to building permit issuance. The landscape plan shall emphasize native plant materials and shall include sufficient planting to screen views of the project from Toro Creek Road. The planting shall be designed to achieve substantial screening of the WRRF within 7 years.

VIS-2: To mitigate potentially significant impacts from a new source of substantial light or glare which would adversely affect nighttime views in the area, a final lighting plan shall be prepared and implemented for the WRRF. The plan shall include proper shielding, proper orientation, and minimum height standards to achieve safe light levels on the ground. All lighting fixtures shall be shielded so that neither the lamp nor the related reflector interior surface is visible from adjacent properties. Light hoods shall be dark-colored.

TR-1: Prior to building permit issuance, a Traffic Management Plan shall be prepared for review and approval by the County of San Luis Obispo Public Works Department and the City of Morro Bay Public Works Department. The traffic management plan shall be based on the type of roadway, traffic conditions, duration of

construction, physical constraints, nearness of the work zone to traffic and other facilities (bicycle, pedestrian, driveway access, etc.). The traffic management plan shall include:

- Advertisement. An advertisement campaign informing the public of the proposed construction activities should be developed. Advertisements should occur prior to beginning work and periodically during the course of project construction.
- Property Access. Access to parcels along the construction area shall be maintained to the greatest extent feasible. Affected property owners shall receive advance notice of work adjacent to their property access and when driveways would be potentially closed.
- Schools. Any construction adjacent to schools shall ensure that access is maintained for vehicles, pedestrians, and bicyclists, particularly at the beginning and end of the school day.
- Buses, Bicycles and Pedestrians. The work zone shall provide for passage by buses, bicyclists and pedestrians, particularly in the vicinity of schools.
- Intersections. Traffic control (i.e. use of flag men) shall be used at intersections that are determined to be unacceptably congested due to construction traffic.

N-1: The CSD shall require construction contractors to adhere to the following noise attenuation requirements:

- Construction activities shall be limited to between the hours of 7 a.m. to 9 p.m. on any day except Saturday or Sunday or between the hours of 8 a.m. to 5 p.m. on Saturday or Sunday.
- All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from the nearest residence, unless safety or technical factors take precedence.
- Stationary combustion equipment such as pumps or generators operating within 100 feet of any residence shall be shielded with a noise protection barrier.

AQ-1: The following standard San Luis Obispo County Air Pollution Control District (SLOAPCD) dust control measures shall be implemented:

a) The amount of the disturbed area shall be minimized;
b) Water trucks or sprinkler systems shall be used in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency shall be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water or an APCD-approved dust suppressant should be used whenever possible;
c) All dirt stock pile areas shall be sprayed daily and covered with tarps or other dust barriers as needed;
d) Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading shall be sown with a fast germinating, non-invasive, grass seed and watered until vegetation is established;
e) All disturbed soil areas not subject to revegetation shall be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
f) All roadways, driveways, sidewalks, etc. to be paved shall be completed as soon as possible. In addition, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;
g) Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
h) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with CVC Section 23114;
i) Wheel washers and/or rumble strips shall be installed where vehicles enter and exit unpaved roads onto streets; and
j) The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce

visible emissions below the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. The name and telephone number of such persons shall be provided to the APCD Engineering & Compliance Division prior to the start of any grading, earthwork or demolition.

k) AQ-2: Prior to starting any ground-disturbing construction activities for the new influent, effluent, or RW pipelines to CSA-10, the applicant shall conduct a geologic evaluation for NOA along the pipeline routes following the Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California (California Geologic Survey [CGS] Special Publication 124, 2002) to determine whether the construction of the pipelines has the potential to disturb NOA, and if so, how many acres. If no NOA is expected to be disturbed, the applicant shall submit a request for an exemption from CARB's Asbestos ATCM, along with the geologic evaluation report. If NOA is expected to be disturbed, the SLOAPCD must be notified and preparation and approval of an Asbestos Dust Mitigation Plan and Asbestos Health and Safety Program may be required.

AQ-3: The applicant shall implement the following idling control techniques:

California Diesel Idling Regulations

a) On-road diesel vehicles shall comply with Section 2485 of Title 13 of the California Code of Regulations. This regulation limits idling from diesel-fueled commercial motor vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
   - Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and
   - Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

b) Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation.

c) Signs must be posted in the designated queuing areas and job sites to remind drivers and operators of the state's 5-minute idling limit.

Diesel Idling Restrictions Near Sensitive Receptors (i.e., Morro Bay High School and Residential Dwellings along the Pipeline Routes)

In addition to the State required diesel idling requirements, the project applicant shall comply with these more restrictive requirements to minimize impacts to nearby sensitive receptors:

a) Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
b) Diesel idling within 1,000 feet of sensitive receptors shall not be permitted;
c) Use of alternative fueled equipment is recommended; and
d) Signs that specify the no idling areas must be posted and enforced at the site.

AQ-5: Prior to receipt of the Authority to Construct (ATC) from the SLOAPCD for the project, the applicant must submit an Odor Monitoring and Complaint Response Plan for review and approval by the SLOAPCD.

HZ-2. Fire Safety and Evacuation Plan. Applicant shall provide a written Fire Safety plan whose contents shall be in accordance with sections California Fire Code Chapter 4 Emergency Planning and Preparedness. Employee training, record keeping, hazard communication and drills will also comply with this chapter. The written plan will include at a minimum the detail outlined in sections 404.3.1 (Evacuations Plans) and 404.3.2 (Fire Safety Plans).

HZ-3: To minimize the risk of exposure to disease vectors, activities with the potential to mobilize spores associated with Valley Fever, the CSD shall implement the following, as applicable:

a) Implement all of the mitigation measures relating to the control of dust during construction activities;

b) Provide National Institute for Occupational Safety and Health (NIOSH)-approved respirators for workers. Workers should be medically evaluated, fit-tested, and properly trained on the use of the respirators, and a full respiratory protection program in accordance with the applicable Cal/OSHA Respiratory Protection Standard (8 CCR 5144) should be in place;
c) Prohibit eating and smoking at the project site and provide separate, clean eating areas with hand-washing facilities;
d) Avoid outdoor operations during unusually windy conditions;
e) Limit ground disturbing activities during the fall to essential jobs only, as the risk of cocci infection is higher during this season.
f) Thoroughly clean equipment, vehicles, and other items before they are moved off-site to other work locations;
g) Provide workers with coveralls daily, lockers (or other system for keeping work and street clothing and shoes separate), daily changing and showering facilities.
h) Clothing should be changed after work every day, preferably at the work site;
i) Train workers to recognize that cocci may be transported offsite on contaminated equipment, clothing, and shoes; alternatively, consider installing boot-washing stations; and
j) Post warnings onsite and consider limiting access to visitors, especially those without adequate training and respiratory protection.

HZ-4: Prior to construction activities that involve soil disturbance, the CSD shall develop and implement a Soil Sampling and Analysis Plan to determine the presence and extent of any residual herbicides, pesticides, and fumigants on historically-farmed land in agricultural areas that would be disturbed during ground-disturbing activities associated with the project. The Plan shall be prepared in consultation with the San Luis Obispo County Department of Environmental Health Services and the work shall be conducted by an appropriate California-licensed professional and samples sent to a California Certified laboratory. At a minimum, the Plan shall document the areas proposed for sampling, the procedures for sample collection, the laboratory analytical methods to be used, and the pertinent regulatory threshold levels for determining proper excavation, handling, and, if necessary, treatment or disposal of any contaminated soils. The Plan shall be submitted to the Department and the San Luis Obispo County Department of Environmental Health Services for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for excavation, handling, dust control, and treatment/disposal of material found to exceed regulatory. Practices shall be submitted to the Department prior to construction.

GRO-1: To avoid potentially significant growth inducing effects, the CSD shall limit the sale of tertiary treated water for domestic use to water purveyors serving lots within the Urban Reserve Line for Cayucos as set by the County and LAFCO.

Current Land Use and Zoning

The project site is located on Toro Creek Road about 0.75 miles east of State Route 1 between the City of Morro Bay and the community of Cayucos. The project site occupies a portion of an alluvial plain formed along the southern side of Toro Creek, an ephemeral creek that flows to the ocean from the foothills of the Santa Lucia Range. There are no structures or other improvements on the project site except for a shed housing an existing well. A portion of the Project Site has been cultivated as recently as 2015, but is currently fallow. The Project Site is not in an active Williamson Act contract.

Surrounding land uses include grazing and dry farming on agricultural properties of 80 or more acres. To the west is a tank farm associated with petroleum operations. The nearest dwellings are located approximately 0.5 miles to the west along Toro Creek Road and another farmhouse located approximately 0.7 miles to the east.

The WRRF is located at the western boundary of the Adelaida Sub-Area of the County of San Luis Obispo's North County Area Plan (NCAP). The primary land use in this area is agriculture on large lots. Accordingly, the planning goals for the area encourage the preservation of agriculture while focusing urban development within the incorporated cities and existing unincorporated urban areas. Development in the community of Cayucos and surrounding properties within the Coastal Zone (i.e., the proposed pipelines) is subject to the Estero Area Plan/Certified Local Coastal Program.

All development in the unincorporated County landward of the Coastal Zone is subject to the Inland portion of the County Land Use ordinance (LUO, Title 22 of the County Code). The Project Site is located on land zoned for Agriculture. Public Utility Facilities (which includes wastewater treatment facilities) is an allowed use in Agriculture land use category subject to the approval of a Conditional Use Permit (CUP) by the County Planning Commission.

Formally Classified Lands

Formally classified lands include National Parks, National Monuments, National Forests, National Marine Sanctuaries, National Estuarine Research Reserves, National Wildlife Refuges, National Natural Landmarks managed by the National Parks Service, Cooperative Management and Protection Areas managed by the Bureau of Land Management, and Coordination Areas and Waterfowl Production Areas managed by the U.S. Fish and Wildlife Service, and Coastal Zone areas. Portions of the Proposed Action occur within the Coastal Zone (and are discussed in more detail below under Coastal Areas). Otherwise, the Proposed Action does not lie within, or affect, any formally classified lands. The nearest formally classified lands include the southern extent of the Monterey Bay National Marine Sanctuary which ends at Cambria, approximately 15 miles north of Cayucos.

Environmental Justice

Environmental justice refers to the extent to which the project could result in an inequitable environmental burden borne by groups such as low income and minority populations.

Cayucos is considered a "bedroom community" in that roughly 85 to 90 percent of their workers commute to jobs in other communities. Although the city of Morro Bay provides some employment for local residents (and contributes significantly to the area's economy), a large percentage of local workers find employment in the San Luis Obispo area.

Cayucos has some businesses that provide retail and service uses to local residents, but it lacks major employers, large-scale manufacturing and industrial uses. Tourism and visitor-serving businesses are the most important sector of the local economy.

According to the latest American Community Survey of the United States Census Bureau, the population within the Cayucos was 2,552 in 2014.

The WWRF site is located in a rural area with low population. According to the Environmental Justice analysis in the EIR for the Proposed Action, incorporated herein by reference, the percentage of low income households and minorities in proximity to the WRRF and associated pipelines is less than the percentages for Cayucos and for the County, and the percentage of minorities does not meet the definition of a "minority population." Therefore, construction and operation of the WRRF will not disproportionately impact low income populations or a minority population.

Intergovernmental Review

The CSD's sphere of influence (the area outside the current service boundary where the CSD will eventually extend services) includes areas along the coast, and north of State Route 1. The CSD is coordinating with the Local Agency Formation Commission (LAFCo) to amend its sphere of influence to include the new public lot for the WRRF that would be generated by the Proposed Action.

In addition, the following discretionary authorizations will be needed for the Proposed Action:

- San Luis Obispo County for a Conditional Use Permit, and a Coastal Development Permit for infrastructure in the Coastal Zone;
- County of San Luis Obispo Public Works Department for an encroachment permit for infrastructure in the public right of way;
- State Water Resources Control Board (SWRCB) - As part of their responsibility to implement the Clean Water Act and the Porter-Cologne Water Quality Control Act, the SWRCB through its subsidiary the Central Coast RWQCB, must approve the CSWP treatment and disposal system and issue an NPDES and Waste Discharge Requirements (WDR) discharge permit prior to operations beginning and a Master Reclamation Permit prior to reuse of the reclaimed water;
- California Department of Transportation for encroachment permit for infrastructure in the state highway right of way;
- California Department of Fish and Wildlife for a Section 1602 Lake and Streambed Alteration Agreement for creek crossings;
- City of Morro Bay for a Coastal Development Permit for pipeline conveyance and outfall lift station and tie-in construction;
- Possibly California Coastal Commission for a Coastal Development Permit for outfall tie-in construction;
- The County Department of Agriculture (Department) is responsible for protecting agricultural resources and operations from the negative effects of encroaching suburban and urban development. The Department acts in an advisory capacity to the County Planning and Building Department when reviewing land use projects; and
- San Luis Obispo County Air Pollution Control District (SLOAPCD) – an Authority to Construct (ATC) and Permit to Operate (PTO) will be required for construction and operation of the Proposed Action.

Each Responsible Agency for the discretionary authorizations above has been contacted regarding the Proposed Action, and received a Notice of Preparation (NOP) for the EIR for the Proposed Action on April 21, 2016 providing them with the opportunity to comment on the nature and scope of the project and the future impact analysis for the project. Each of these agencies will also receive a copy of the Public Draft EIR with the opportunity to review and comment on the environmental impact analysis of the Proposed Action pursuant to CEQA.

In addition, early notification of the Proposed Action was provided to Native American tribal representatives in the geographic area who are traditionally and culturally affiliated in San Luis Obispo County pursuant to Assembly Bill 52 requirements. Consultation with the Northern Chumash Tribal Council and the yak tityu tityu Northern Chumash Tribe has been initiated for the Proposed Action and has been ongoing as discussed in more detail under Section IV Historic Preservation.

Environmental Due Diligence

The Proposed Action is not on a site identified as a hazardous waste site based upon a query of the following lists:

- List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database (http://www.envirostor.dtsc.ca.gov/public/);
- List of Leaking Underground Storage Tank Sites by County and Fiscal Year from Water Board GeoTracker database (http://geotracker.waterboards.ca.gov/);
- List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit (http://www.calepa.ca.gov/SiteCleanup/CorteseList/CurrentList.pdf);
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from Water Board (http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm); and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC (http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm).

The WRRF site is located in an area that has been in active agricultural production. A variety of agricultural operations have been conducted on the project site, including grazing, dry farming and irrigated cultivation. Portions of the project site have been leased to farmers since the 1960s. The lease information suggests that the fertile alluvial soils adjacent to Toro Creek Road have been irrigated and cultivated since the 1960s. Therefore, there is the potential for residual herbicides, pesticides, and fumigants to exist in the WRRF location.

Installation of new pipelines would occur within existing routes or within existing road shoulders, where it is unlikely to encounter contaminant levels warranting cleanup. However, there is the potential to encounter Naturally Occurring Asbestos (NOA) along the pipeline routes due to the presence of serpentine rock in the area. However, as discussed below under Environmental Risk Management, with implementation of avoidance and minimization measures, potential impacts would be reduced to less than significant levels.

Impacts on Historic Resources

A Phase I Archaeological Investigation was conducted for the Proposed Action by Cultural Resource Management Services (CRMS), followed by a Phase II archaeological investigation by Applied Earthworks to assess the potential effects of the project on archaeological site CA-SLO-879/H. Archaeological sites CA-SLO-879/H and CA-SLO-165 lie within the Area of Potential Effects (APE) of the Proposed Action. Site CA-SLO-879/H is historically significant and eligible for listing on the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP); site CA-SLO-165 is also historically significant. The Phase I Archaeological Investigation and Phase II Cultural Resources Impact Assessment are incorporated herein by reference and included in Appendix E.

The results of Applied Earthworks' impact assessment conclude that the boundaries of CA-SLO-879/H lie adjacent to, but not within the WRRF site, but that the pipeline route leading to and from the WRRF site along Toro Creek Road passes through the archaeological site. The investigation concludes that the pipeline route would pass through areas that have previously been disturbed, but intact archaeological deposits are preserved beneath the surface disturbance. Such intact deposits would be adversely affected by trenching for pipeline installation without special design considerations.

Without special design considerations, installation of the new pipelines to and from the WRRF along Toro Creek Road would significantly and adversely impact archaeological site CA-SLO-879/H. However, CSD has agreed to implement minimization measure CUL-2, which would require directionally drilling the pipelines beneath the maximum depth of the cultural deposit to ensure that the pipelines would not impact any intact undisturbed cultural resources. Measure CUL-2 mandates that this measure be implemented exactly as required in the Cultural Resources Impact Assessment Report prepared by Applied Earthworks for the project. Measure CUL-2 also requires archaeological monitoring at all times for installation of the pipelines along Toro Creek Road to ensure that this measure is adhered to and that intact cultural resources are not disturbed. With implementation of this measure, the project is not anticipated to have an adverse effect on historically significant archaeological site CA-SLO-879/H.

The effluent pipeline route also passes within the recorded boundaries of archaeological site CA-SLO-165 in the vicinity of Main Street, State Route-41, and State Route-1. However, the existing effluent pipeline in this area will only be replaced within the existing trench. Therefore, no new ground disturbance would take place in this area, and this archaeological site would not be affected adversely by the project.

USDA Rural Development (formerly known as the Rural Economic and Community Development Services [RECDS]) has consulted with the State Historic Preservation Officer (SHPO) and Advisory Council on Historic Preservation (ACHP) on its programs and activities that may affect historic resources pursuant to Section 106 of the National Historic Preservation Act (NHPA), including properties on or eligible for listing on the National Historic Register of Historic Places (NRHP). The Programmatic Agreement between USDA Rural Development and the SHPO and ACHP that was reached during this Section 106 consultation is included in Appendix F. According to the Programmatic Agreement, projects that meet the criteria in Appendix A of the Programmatic Agreement have been determined to not require further review by the SHPO or ACHP (Stipulation IV.A of the Programmatic Agreement).

Appendix A of the Programmatic Agreement includes the following activities under USDA's Community and Business Programs:

- "New or replacement utilities within previously disturbed road right-of-way or utility corridors that do not involve extensive ground disturbance;"
- "New or replacement water wells and related facilities, provided they do not involve extensive ground disturbance;" and
- "Construction on sites where the ground has been extensively disturbed."

Therefore, the Proposed Action meets the criteria of the activities described in Appendix A of the Programmatic Agreement, and therefore, should not require further review by the SHPO and ACHP. USDA Rural Programs would report the activity to the SHPO following Stipulation IX in the Programmatic Agreement.

Native American Consultation

Assembly Bill (AB)-52 establishes a consultation process with all California Native American Tribes on the Native American Heritage Commission (NAHC) list; including Federal and Non-Federal Recognized Tribes, to include them in the CEQA environmental analysis to determine potential impacts on Tribal Cultural Resources. AB-52 defines Tribal Cultural Resources as a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a tribe and is either eligible for the California Register of Historic Resources or a local historic register.

On April 28, 2016, early notification of the Proposed Action was provided to tribal representatives in the geographic area who are traditionally and culturally affiliated in San Luis Obispo County. Subsequent to that contact, a site meeting was conducted for consultation with the Northern Chumash Tribal Council and the yak tityu tityu Northern Chumash Tribe on the Proposed Action. Consultation has been ongoing with these representatives. AB 52 documentation is included in Appendix G.

5 THREATENED AND ENDANGERED SPECIES/BIOLOGICAL RESOURCES

Federally Listed and Proposed Listed Species

A Biological Assessment was prepared for the Proposed Action (Althouse and Meade 2016), is included in Appendix C, and is incorporated herein by reference. The Biological Assessment concludes that the Proposed Action may affect, but is not likely to adversely affect the federally listed California red-legged frog (*Rana draytonii*), tidewater goby (*Eucyclogobius newberryi*), and South-Central California Coast steelhead (*Oncorhynchus mykiss irideus*) as summarized in Table 2 below. In addition, the Biological Assessment concludes that the Proposed Action is not likely to cause an adverse modification to designated critical habitat.

Table 2 Summary of Effects Determinations on Federally Threatened and Endangered Species

Species	Critical Habitat	Status	Notes	Federal Endangered Species Act (ESA) Determination
Tidewater goby	Designated Critical Habitat Present in Action Area	Endangered	Species confirmed to be present in the past in Toro Creek downstream of Action Area	May Affect, Not Likely to Adversely Affect the species and Not Result in the Destruction or Adverse Modification of Designated Critical Habitat
California red-legged frog	Designated Critical Habitat Present in Action Area	Threatened	Species confirmed to be present in the past in Toro Creek near Action Area	May Affect, Not Likely to Adversely Affect the species and Not Result in the Destruction or Adverse Modification of Designated Critical Habitat
South-Central California Coast steelhead	Designated Critical Habitat Present in Action Area	Threatened	Species confirmed to be present in Toro Creek in Action Area	May Affect, Not Likely to Adversely Affect the species and Not Result in the Destruction or Adverse Modification of Designated Critical Habitat

Specifically, the Biological Assessment concludes that installation of new influent, effluent, and reclaimed water pipelines across Toro Creek may affect these species, but is not likely to adversely affect them or adversely modify designated critical habitat. Pipelines for the Proposed Action would cross three other creeks, including Old Creek and Willow Creek in Cayucos and Alva Paul Creek in Morro Bay, however, the pipelines would run along existing roads within existing developed right of way in these crossings; therefore, these crossings would not affect any listed, proposed listed, or other sensitive species.

Tidewater goby, a federally endangered species, has been documented in Toro Creek at the lagoon at the mouth of the creek and the willow-lined lower portions of the creek upstream of the lagoon. The new influent, effluent, and reclaimed water pipelines for the Proposed Action would cross designated critical habitat for the species located within lower Toro Creek which extends from the mouth of the creek to just upstream of the Toro Creek Road bridge (Althouse and Meade 2016).

South-Central California Coast steelhead are federally threatened and also known to occur in Toro Creek; steelhead fry were observed there in 2015 surveys for the Proposed Action. Toro Creek is designated critical habitat for this species as well.

Tidewater goby, South-Central California Coast steelhead, and designated critical habitat for these species would not be directly impacted by the Proposed Action, as installation of the pipelines would not directly impact the bed or banks of Toro Creek (Althouse and Meade 2016). Pipelines would be anchored to each side of the creek on new small concrete abutments that would be located outside of the top of bank of the creek and would span the creek on a pipe bridge without the need for piles. The pipe bridge can be installed via a crane such that there would be no ground disturbance past the top of bank of the creek or within the riparian corridor. Sedimentation from ground disturbing activities close to Toro Creek could impact steelhead or the tidewater goby in the creek or their critical habitat. An avoidance and minimization measure designed to avoid direct impacts and minimize indirect impacts to these species and designated critical habitat (BIO-5 discussed above), has been incorporated into the Project to prevent sedimentation of the creek during construction and prevent impacts to riparian habitat surrounding the creek. Therefore, the Proposed Action is not likely to adversely affect steelhead or tidewater goby, and will not cause adverse modification of designated critical habitat for either species.

California red-legged frog has been documented in Toro Creek and could utilize surrounding upland habitat as well. The Proposed Action Area occurs almost entirely within designated critical habitat for the species. Avoidance and minimization measures BIO-4 through BIO-5 are designed to avoid direct impacts and minimize indirect impacts to the species and to Toro Creek and California red-legged frog critical habitat. Exclusion fences put in place at the edges of the WRRF site, biological monitoring, and worker training required in the avoidance and minimization measures will minimize the risk of accidental take of frogs having the potential to move through upland habitat. Therefore, California red-legged frogs are not likely to be adversely affected by the Proposed Action, and the Proposed Action will not cause adverse modification of designated critical habitat.

At the time that the Biological Assessment was prepared, there were no planned projects within the Toro Creek watershed having the potential to effect California red-legged frog, tidewater goby, or South-Central California Coast steelhead. Therefore, no significant cumulative effects or significant cumulative impacts on these species are expected.

Other Biological Resources

Vegetation Communities: The WRRF site comprises active agricultural land bordered by ruderal vegetation dominated by non-native annual grasses such as ripgut brome (*Bromus diandrus*) and non-native forbs. The field is surrounded by barbed wire fence. Rock outcroppings on the adjacent hill indicate a serpentine influence in the soils in the site. At the southern tip of the field, on the toe of the slope, there is a small patch of transitional habitat that shows similarities to the uphill native grassland habitat. In this area, more native plant species were observed than the adjacent ruderal vegetation, and club-haired mariposa lily (*Calochortus clavatus* var. *calavatus*), a special status species, was detected (see below).

The WRRF site is bisected by an agricultural ditch which conveys storm flows from an existing natural drainage on the slope above the site in a northwest direction toward Toro Creek. There is no riparian habitat in the agricultural ditch, which likely only holds water during heavy rain events. Because the ditch is a historic modification of a natural drainage, it is considered waters of the U.S. There is also a small patch of riparian habitat at the eastern edge of the WRRF site where the natural drainage flows into the ditch. However, neither this drainage nor the riparian habitat at the eastern

edge of the WRRF site will be disturbed from the project (please also see Section 6, Wetlands and the Project Description).

On the west side of Toro Creek Road, where the pipeline route runs to and from the WRRF, the land is split into two separate fields divided by a barbed wire fence. The field to the south shows signs of recent grazing and is made up entirely of annual grassland dominated by non-native grasses. The field to the north is an active agricultural field.
The only native plant community present within the area of the Proposed Action is willow riparian woodland habitat present at the pipeline crossing of Toro Creek, and also at Old Creek where the RW pipeline to CSA 10 will cross along the existing roadway.

The willow riparian woodland habitat along Toro Creek at the bridge location is dominated by arroyo willow (*Salix lasiolepis*) and Fremont's cottonwood (*Populus fremontii*). The understory is a dense mixture of poison oak, stinging nettle (*Urtica dioica* ssp. *holosericea*), and California mugwort (*Artemisia douglasiana*), along with other shrubs and forbs. Toro Creek is flowing and has a mix of cobblestone and sandy bottom. Old Creek is dominated by a dense arroyo willow canopy and poison oak understory. Water is flowing in the creek along a sandy bottom.

Willow riparian habitat within the Coastal Zone is considered an Environmentally Sensitive Habitat Area under the California Coastal Act (ESHA) and County policies (please also see Section 6, Wetlands, and Section 8, Coastal Areas). Where conveyance structures will be installed adjacent to the Toro Creek Road bridge, there may be minimal trimming of riparian canopy vegetation above the banks of the stream to allow access for crane placement of the pipe conduit spanning the creek banks. However, impacts to the vegetation would be minimal and are expected to grow back quickly. Therefore, the riparian corridor as a whole is not anticipated to be impacted.

The remainder of the pipeline routes is dominated by weedy non-native grasses and forbs, ornamental species, or pavement.

Other Special Status Species. Plants on the list of sensitive species maintained by the California Native Plant Society (i.e., with a California Rare Plant Rank [CRPR]), and fish and wildlife species considered species of special concern (CSC) by the California Department of Fish and Wildlife (CDFW), are also considered special status species, in addition to listed and proposed listed species discussed above.

In addition, the federal Migratory Bird Treaty Act prohibits the pursuit, hunt, capture, kill, or sale of native migratory birds including their nests, eggs, and young, and Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take (as defined therein) of native birds, nests, and young as well. The federal Bald and Golden Eagle Protection Act (BGEPA) also protects bald and golden eagles including their nests and young.

A summary of potential impacts on special status species, other than listed or proposed listed species, is contained below.

Botanical surveys conducted in April, May, and June 2016 identified 102 species, subspecies, and varieties of vascular plant taxa within the project Study Area, including 40 native species and 62 introduced species. There are five special status plant species that could potentially occur in the Study Area based on an analysis of known ecological requirements of these species and the habitat conditions that were observed. However, in plant surveys during the blooming periods for these species, only one special status plant species was identified in the area of the Proposed Action, the club-haired mariposa lily (*Calochortus clavatus* ssp. *clavatus*), a CRPR List 4.3 subspecies. A complete list of all plant species found during botanical surveys can be found in a Biological Technical Report prepared for the project, contained in Appendix B of the EIR, which is incorporated herein by reference. Measure BIO-2 would ensure that the club-haired mariposa lily will not be disturbed by the Proposed Action, and it is unlikely that the Proposed Action would disturb any other special status plant species. Therefore, there would be no adverse effects on this species.

There are 17 special status animal species that could potentially occur in the Study Area based on an analysis of known ecological requirements of these species and the habitat conditions that were observed in the project site. Twenty-six

fish and wildlife species were observed in the Proposed Action area. A complete list of all wildlife species seen during site visits, as well as wildlife species that have potential to occur in the Proposed Action area, is found in the Biological Technical Report contained in Appendix B of the EIR, incorporated herein by reference. In addition to steelhead, the special status species Nuttall's woodpecker (*Picoides nuttallii*) and an aggregation site for the monarch butterfly (*Danaus plexippus*), non-listed species tracked by CDFW, were observed in the Proposed Action area.

Nuttall's woodpecker was observed within the riparian corridor of Toro Creek during project surveys but primarily occur and nest within oak woodland habitat. This species could occur intermittently within the Proposed Action area, but because there are no oak trees in the Proposed Action area, adverse effects on this species are unlikely.

Monarch butterflies winter in the San Luis Obispo area at specific aggregation sites that provide protection from winter weather. The eucalyptus grove on Toro Creek Road, along the pipeline route is a known aggregation site (California Natural Diversity Data Base [CNDDB] Record #118) for monarch butterflies. In November 2016, 110 monarchs were observed at the roost trees (on the south side of Toro Creek Road), while in 2015, 1700 monarchs were observed, and 3200 were documented in 2013. Butterflies are likely present at the site, in varying numbers, from year to year and could be impacted by pipeline construction along Toro Creek Road. A small stand of eucalyptus trees, on the southwest corner of the intersection of State Route-1 and San Jacinto Street, is another known aggregation site (CNDDB Record #254). This site is across State Route-1 from the pipeline route. Monarchs were last noted at the site in 1991, and this site is no longer suitable for monarchs due to the gradual removal of eucalyptus trees. Monarch butterfly aggregation sites could be affected by dust generated during construction and/or impacts to eucalyptus trees in the pipeline route. A survey of the Toro Creek Road grove prior to construction and avoidance of roost trees required in measure BIO-7 would minimize effects on monarchs to ensure that no adverse effects would occur.

The special status western pond turtle, two-striped garter snake, coast range newt, and foothill-yellow legged frog could occur in Toro Creek and surrounding riparian habitat as discussed in more detail in the Biological Technical Report. For the foothill yellow-legged frog, this is a conservative assumption despite the lack of recent observations of the species in the area. However, direct impacts to Toro Creek and the riparian corridor are not planned under the Proposed Action, and measure BIO-3 would ensure that biological monitoring during ground disturbing activities near these areas would be performed to ensure that there would be no adverse effects on these species.

Road bridges over Toro Creek, Willow Creek, and Old Creek, and the Alva Paul Creek box culvert may provide roosting habitat for bats, including the special status pallid bat. These species were not observed to be roosting in the Proposed Action area during surveys conducted for the Proposed Action, however, measure BIO-6 would ensure that these species are not present prior to construction, or if detected prior to construction, that adverse effects on these species are avoided (if maternity roosts are found) or minimized (for other roosting activity).

Finally, vegetation removal and construction activities associated with the Proposed Action could result in adverse impacts to nesting birds if conducted during the nesting season (March 15 through August 15). However, implementation of measure BIO-1 would ensure that pre-construction surveys are conducted and any nesting birds in or near the Proposed Action area during construction would be avoided if found, until nesting activities have ceased. With implementation of this measure, there would be no adverse effects on nesting birds.

During biological surveys performed for the Proposed Action, it was determined that neither the WRRF nor the proposed new pipelines would directly remove wetlands protected under Executive Order 11990, the Clean Water Act, Section 1600 of the California Fish and Game Code, or the California Coastal Act. Results of these surveys are contained in the EIR for the Proposed Action, incorporated herein by reference.

Construction of the new pipelines would involve crossing four creeks at existing bridge crossings. One crossing, would involve installation of a new crossing, across Toro Creek, which would trigger a requirement to obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife pursuant to Section 1600 of the California Fish and Game Code. The other three crossings would be along existing roads within existing developed right of way.

The Toro Creek crossing would not involve fill of, or discharge into, Toro Creek. The pipelines would rest on new concrete abutments that would be installed outside of the banks of the creeks. Where conveyance structures will be installed adjacent to the Toro Creek Road bridge, there may be minimal trimming of riparian canopy vegetation above the banks of the stream to allow access for crane placement of the pipe conduit spanning the creek banks. However, impacts to the vegetation would be minimal and are expected to grow back quickly. Therefore, the riparian corridor as a whole is not anticipated to be impacted. However, construction activities have the potential to introduce sediment and other pollutants into Toro Creek, and the other three creeks, without implementation of additional measures. Therefore, implementation of a Storm Water Pollution Prevention Control Plan and associated erosion control measures under measure WQ-3 and BIO-5 would be implemented to ensure minimal impacts to creek water quality. Therefore, no adverse effects are anticipated.

Finally, a drainage runs through the WRRF, northeast of the treatment facility and southwest of the proposed solar array location (Exhibit 1). This drainage is considered potential waters of the United States protected under Sections 404 and 401 of the Clean Water Act. However, construction or operation of the Proposed Action would not introduce fill or discharge into this drainage. Implementation of the Storm Water Pollution Prevention Plan and associated erosion control measures under WQ-3 and BIO-5 would also ensure there would be no adverse effects on water quality within this drainage.

Areas subject to flooding during 100-year events are limited to areas immediately adjacent to creek channels in the area of the Proposed Action. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) identifies regions that are inundated during a 100-year storm and according to County geographic information system (GIS) data, the Proposed Action site is near but not within these 100-year flood zones on Toro Creek.

The influent pipeline and treated effluent conveyance pipeline would cross Toro Creek, which is located within the 100-year flood hazard area. However, the pipelines would be buried within the 100-year flood hazard area, and therefore, would not adversely affect the hydrologic character of the floodplain. Therefore, this would not be considered an extraordinary circumstance.

Construction of the pipelines in support of the WRRF will occur within the Coastal Zone. Both the County of San Luis Obispo and the City of Morro Bay must issue Coastal Development Permits (CDP) for the Proposed Action. In addition, because the CSD is requesting funding from the USDA, a Coastal Consistency Determination would be required in compliance with the Coastal Zone Management Act (CZMA) (16 U.S.C. Sections 1451-1465) and implementing regulations contained in 15 CFR 930. Specifically, Subpart C of these regulations apply to the Proposed Action. As part of this Coastal Consistency Determination process, the USDA must document that the Proposed Action would remain consistent with the goals and policies of the California Coastal Act (Public Resources Code Section 30210-30214) to the maximum extent practicable.

The Proposed Action would be consistent with the policies of the California Coastal Act as discussed in detail below in Table 3.

Table 3. Analysis of Consistency with California Coastal Act Policies

California Coastal Act Policy	Analysis of Consistency
Public Access	
30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	**Consistent.** Installation of new pipelines for the project would not interfere with public access to the beach. Therefore, the Proposed Action would be consistent with this policy.
Marine Environment	
30230. Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.	**Consistent.** The Proposed Action would improve the quality of wastewater discharged to the ocean in Morro Bay to a tertiary treatment level. In addition, because the Proposed Action would involve the use of some water for nearby agriculture, the volume of wastewater discharged to the ocean is expected to decrease from existing conditions. In addition, no work would be done within coastal waters under the Proposed Action. Therefore, the Proposed Action would have a net benefit on marine resources and would be consistent with this policy.
30231. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	**Consistent.** The Proposed Action would involve installation of pipelines across 4 creeks which has the potential to result in water quality impacts to the creeks during construction due to the introduction of sediment and other potential pollutants. However, preparation and implementation of a Storm Water Pollution Prevention Plan and associated erosion control measures during construction under measure WQ-3 and BIO-5 would ensure that these potential impacts would be minimal and less than significant. A small of amount of vegetation would need to be trimmed at the Toro Creek crossing, however, the trimming would be minimal, and therefore, would not affect the riparian habitat as a whole. Finally, the Proposed Action would also have a net benefit on marine resources as discussed under Section 30230 of the California Coastal Act above. Therefore, the Proposed Action would be consistent with this policy.

Land Resources	
30240. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.	**Consistent.** The Proposed Action would involve installation of pipelines across creeks considered Environmentally Sensitive Habitat Areas (ESHA), which has the potential to result in water quality impacts to the creeks during construction due to the introduction of sediment and other potential pollutants. However, preparation and implementation of a Storm Water Pollution Prevention Plan and associated erosion control measures during construction under measure WQ-3 would ensure that these potential impacts would be minimal and less than significant. A small of amount of vegetation would need to be trimmed at the Toro Creek crossing, however, the trimming would be minimal, and therefore, would not affect the riparian habitat as a whole. The Proposed Action would also have a net benefit on marine resources as discussed under Section 30230 of the California Coastal Act above. No other ESHA or parks and recreation areas would be affected by the Proposed Action. Therefore, the Proposed Action would be consistent with this policy.
30241. The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following: (a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses. (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development. (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250. (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands. (e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality. (f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant	**Consistent.** A total of 8 acres of prime farmland would be removed from potential agricultural production due to the construction of the WRRF facility and the associated solar array under the Proposed Action (i.e., through installation of concrete, asphalt, buildings, and associated landscaping and infrastructure). To offset this impact, as part of the Proposed Action, the CSD will be conserving adjacent prime farmland on a 2:1 basis (or 16 acres) in perpetuity through a deed restriction, conservation easement, or other mechanism. The proposed new pipelines would occupy another 1.62 acres, but would be installed in existing road rights of way and would not be installed in areas that have important farmland. The primary Purpose and Need of the Proposed Action is to treat wastewater from the existing community of Cayucos to a higher-level treatment. Development in the Cayucos area is not currently limited by wastewater treatment capacity; therefore, the Proposed Action is not expected to directly cause development, including conversion of agricultural land. In addition, another Purpose and Need of the Proposed Action is to provide reclaimed water to nearby agricultural land, thereby promoting the enhancement and preservation of agricultural land in the area. Finally, pursuant to the Farmland Protection Policy Act (7 U.S.C. Section 4201), the USDA conducted a

to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of prime agricultural lands. **30242.** All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.	Land Use Site Assessment (LESA) and completed associated Form AD-1006 to determine the impact of removing prime farmland from current production. The Proposed Action would have a LESA score of 106. The LESA results were forwarded to the Natural Resources Conservation Service (NRCS), and the NRCS concurs. Therefore, the Proposed Action can proceed pursuant to 7 CFR Section 1970.557 of the USDA's Environmental Policies and Procedures. Therefore, the Proposed Action would be consistent with these policies.
Archaeological or Paleontological Resources	
30244. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.	**Consistent.** Archaeological sites CA-SLO-879/H and CA-SLO-165 lie within the Area of Potential Effect (APE) of the Proposed Action. Site CA-SLO-879/H is historically significant and eligible for listing on the California Register of Historical Places (CRHP) and National Register of Historic Places (NRHP); site CA-SLO-165 is also historically significant. The boundaries of CA-SLO-879/H lie adjacent to, but not within the WRRF site, but that the pipeline route leading to and from the WRRF site along Toro Creek Road passes through the boundaries of the archaeological site. The investigation concludes that most of the pipeline route would pass through areas that have previously been disturbed as a result of installation of Toro Creek Road, and therefore, are unlikely to contain intact cultural resources. However, one segment of the route has the potential to contain intact resources. Without special design considerations, installation of the new pipelines to and from the WRRF along Toro Creek Road would have the potential to significantly and adversely impact archaeological site CA-SLO-879/H. However, CSD has agreed to implement minimization measure CUL-2, which would require directionally drilling the pipelines under the area containing potentially intact resources to ensure that the pipelines would not impact any intact undisturbed cultural resources. Measure CUL-2 mandates that this measure be implemented exactly as required in the Cultural Resources Impact Assessment Report prepared by Applied Earthworks for the project. Measure CUL-2 also requires archaeological monitoring at all times for installation of the pipelines along Toro Creek Road to ensure that this measure is adhered to and that intact cultural resources are not disturbed. With implementation of this measure, the project is not anticipated to have an adverse effect on historically

	significant archaeological site CA-SLO-879/H. The effluent pipeline route also passes within the recorded boundaries of archaeological site CA-SLO-165 in the vicinity of Main Street, State Route-41, and State Route-1. However, the existing effluent pipeline in this area will only be replaced within the existing trench. Therefore, no new ground disturbance would take place in this area, and this archaeological site would not be affected by the project.
Development	
30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.	**Consistent.** Highway 1 is designated within the County of San Luis Obispo's Local Coastal Plan as a visually scenic corridor to be protected, and is designated a State Scenic Highway by the Department of Transportation (Caltrans). The City of Morro Bay's Visual Resources and Scenic Highway Element of the Local Coastal Program has policies to protect the visual quality of the Scenic Highway designation for Highway 1 as well. A segment of the proposed pipeline route will run along Highway 1 within Caltrans right-of-way and within the Scenic Highway corridor. The proposed pipelines along Highway 1 are also located within the County's Coastal Visual Resource area designated in the County's Local Coastal Program (LCP) and within a Sensitive Resource Area as a scenic corridor. The visual quality of this segment is high, with the ocean on the west and mostly open lands to the east. These open lands are rural but have developed features such as fences, gates, landscape trees and shrubs, paved areas and buildings. The pipeline will also run along Ocean Avenue in Cayucos and Main Street / Highway 41 west in the City of Morro Bay which are also within a Coastal Visual Resource area in the County and City's LCP. The pipelines would be buried underground with the exception of four creek crossings at Old Creek and Willow Creek in Cayucos, Alva Paul Creek in Morro Bay, and Toro Creek. For the crossings at Old Creek, Willow Creek, and Alva Paul Creek, the pipelines would be installed along existing roads within developed right of way. At the Toro Creek crossing, the pipelines would be contained within a pipe conduit set on a pipe bridge and concrete abutments located near the existing bridge roughly at the height of the existing bridge. The pipe crossings will be subordinate to, and blend with, the character of the area. The pipe bridge would be marginally visible to a passing vehicle, but not out of scale with the bridge itself and would be subordinate

	to the setting of riparian vegetation. The proposed WRRF is located about 0.75 mile from Highway 1 and would not be visible to viewers traveling on Highway 1 due to intervening topography. The existing nighttime ambient light level in the Toro Creek Valley is very low. The nearest residences in the valley do not have line of sight view to the proposed facility but could see night sky illumination. The WRRF has the potential to impact nighttime views in the project area with the addition of exterior lighting. The facility will not be staffed at night however security lighting is proposed. Measure VIS-1 would ensure that the security lighting would have proper shielding, proper orientation, and minimum height standards to achieve safe light levels on the ground. Because all new structures would have minimal visual impacts, and implementation of avoidance and minimization measures would further ensure that visual impacts are less than significant, the Proposed Action would be consistent with this policy.
30254. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.	**Consistent.** The purpose and need for the Proposed Action is to improve the quality of wastewater generated by the Cayucos community currently discharged to the ocean in Morro Bay at the request and order of the Central Coast Regional Water Quality Control Board and the California Coastal Commission. The Proposed Action would ensure compliance with a Settlement Agreement with the Central Coast Regional Water Quality Control Board and direction given by the California Coastal Commission at their January 10, 2013 meeting regarding the quality of discharges from the existing MBCSD WWTP. The WRRF would be constructed to handle potential future buildout of the Cayucos community and would provide an additional supply of recycled water to the community. However, because development is not currently restricted by wastewater capacity in the area, the Proposed Action would not induce new development. In addition, measure GRO-1 would ensure that sale of tertiary treated water for domestic use is limited to lots within the Urban Reserve Line for Cayucos only. Potential growth inducement impacts would be reduced to less than significant levels with implementation of this measure. Therefore, the Proposed Action would be consistent with these policies.
30254.5. Notwithstanding any other provision of law, the commission may not impose any term or condition on the development of any sewage treatment plant which is applicable to any future development that the commission finds can be accommodated by that plant consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.	
30412. (a) In addition to Section 13142.5 of the Water Code, this section shall apply to the	

commission and the State Water Resources Control Board and the California regional water quality control boards.

(b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate this section. The commission shall not, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights. Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out this division.

(c) Any development within the coastal zone or outside the coastal zone which provides service to any area within the coastal zone that constitutes a treatment work shall be reviewed by the commission and any permit it issues, if any, shall be determinative only with respect to the following aspects of the development:

(1) The siting and visual appearance of treatment works within the coastal zone.

(2) The geographic limits of service areas within the coastal zone which are to be served by particular treatment works and the timing of the use of capacity of treatment works for those service areas to allow for phasing of development and use of facilities consistent with this division.

(3) Development projections which determine the sizing of treatment works for providing service within the coastal zone.

The commission shall make these determinations in accordance with the policies of this division and shall make its final determination on a permit application for a treatment work prior to the final approval by the State Water Resources Control Board for the funding of such treatment works. Except as specifically provided in this subdivision, the decisions of the State Water Resources Control Board relative to the

construction of treatment works shall be final and binding upon the commission. (d) The commission shall provide or require reservations of sites for the construction of treatment works and points of discharge within the coastal zone adequate for the protection of coastal resources consistent with the provisions of this division. (e) Nothing in this section shall require the State Water Resources Control Board to fund or certify for funding, any specific treatment works within the coastal zone or to prohibit the State Water Resources Control Board or any California regional water quality control board from requiring a higher degree of treatment at any existing treatment works.	

The California Coastal Commission has issued a letter declining to assert federal consistency jurisdiction over the project and concludes that the project "does not present any fundamental conflicts with Coastal Act policies at this time" (Appendix H).

An analysis of impacts of the Proposed Action on agricultural resources is contained in the EIR for the Proposed Action incorporated herein by reference. A total of 8 acres of prime farmland would be removed from potential agricultural production due to the construction of the WRRF facility and the associated solar array under the Proposed Action (i.e., through installation of concrete, asphalt, buildings, and associated landscaping and infrastructure). To offset this impact, as part of the Proposed Action, the CSD will be conserving adjacent prime farmland on a 2:1 basis (or 16 acres) in perpetuity through a deed restriction, conservation easement, or other mechanism.

The proposed new pipelines would occupy another 1.62 acres, but would be installed in existing road rights of way and would not be installed in areas that have important farmland.

The primary Purpose and Need of the Proposed Action is to treat wastewater from the existing community of Cayucos to a higher-level treatment. Development in the Cayucos area is not currently limited by wastewater treatment capacity; therefore, the Proposed Action is not expected to directly cause development, including conversion of agricultural land. In addition, another Purpose and Need of the Proposed Action is to provide reclaimed water to nearby agricultural land, thereby promoting the enhancement and preservation of agricultural land in the area.

Pursuant to the Farmland Protection Policy Act (7 U.S.C. Section 4201), the USDA conducted a Land Use Site Assessment (LESA) and completed associated Form AD-1006 to determine the impact of removing prime farmland from current production. The results of the LESA analysis are contained in Appendix D. The Proposed Action would have a LESA score of 106. The LESA results were forwarded to the Natural Resources Conservation Service (NRCS), and the NRCS concurs. Therefore, the Proposed Action can proceed pursuant to 7 CFR Section 1970.557 of the USDA's Environmental Policies and Procedures.

As discussed above, the Proposed Action is not on a site identified as a hazardous waste site based upon a query of the following lists:

- List of Hazardous Waste and Substances sites from DTSC EnviroStor database (http://www.envirostor.dtsc.ca.gov/public/);
- List of Leaking Underground Storage Tank Sites by County and Fiscal Year from Water Board GeoTracker database (http://geotracker.waterboards.ca.gov/);
- List of solid waste disposal sites identified by Water Board with waste constituents above hazardous waste levels outside the waste management unit (http://www.calepa.ca.gov/SiteCleanup/CorteseList/CurrentList.pdf);
- List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from Water Board (http://www.calepa.ca.gov/SiteCleanup/CorteseList/default.htm); and
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC (http://www.calepa.ca.gov/SiteCleanup/CorteseList/SectionA.htm).

The WRRF site is located in an area that has been in active agricultural production. A variety of agricultural operations have been conducted on the project site, including grazing, dry farming and irrigated cultivation. Portions of the project site have been leased to farmers since the 1960s. The lease information suggests that the fertile alluvial soils adjacent to Toro Creek Road have been irrigated and cultivated since the 1960s. Therefore, there is the potential for residual herbicides, pesticides, and fumigants to exist in the WRRF location. However, measure HZ-5 would ensure that any residual chemicals found at the WRRF site at concentrations hazardous to health or the environment would be removed and properly disposed of in coordination with the County's Department of Environmental Health Services. Therefore, risks associated with construction of the WRRF would be less than significant.

Installation of new pipelines would occur within existing routes or within existing road shoulders, where it is unlikely to encounter contaminant levels warranting cleanup. There is the potential to encounter Naturally Occurring Asbestos along the pipeline routes due to the presence of serpentine rock in the area. Testing prior to construction, and implementation of proper handling procedures if present, would be implemented pursuant to measure AQ-2. With implementation of these measures, risks associated with construction of new pipelines would be less than significant.

Operation of the WRRF would involve the transport, storage, use, and disposal of hazardous materials including sodium hydroxide or magnesium hydroxide, sodium hypochlorite, sodium hydroxide, calcium ammonium nitrate, a water-soluble polymer to be used as a flocculant for conditioning of the sludge stream, and sodium bisulfite. In addition, routine cleaning supplies, paints and solvents would be used at the facility. CSD would be required to submit a Hazardous Materials Business Plan to the County Department of Environmental Health Services for review and approval (Measure HZ-1). This requirement would ensure proper handling of hazardous materials during operation of the WRRF. Therefore, impacts would be less than significant.

The Proposed Action would not affect other protected resources. There would be no wastewater discharges to grade and water wells onsite have been designed using modern casing to protect groundwater quality. In addition, the project is not within a wellhead protection area. Therefore, no sole source aquifers would be affected by the Proposed Action.

San Luis Obispo County is in attainment with all National Ambient Air Quality Standards, and the Proposed Action would not result in violation of any local, state, or federal regulations. The applicant is not in violation of any existing permit requirements.

12 REFERENCES

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San Luis Obispo County Department of Planning and Building. 2006. Estero Area Plan.

San Luis Obispo County Department of Planning and Building. 2014. North County Area Plan.

San Luis Obispo County Department of Planning and Building. Coastal Zone Land Use Ordinance, Title 23 Of the County Code.

San Luis Obispo County Department of Planning and Building. Land Use Ordinance – Inland, Title 22 of the County Code.

Appendix A Pipeline Routes


1
Toro Creek Rd
Toro Creek Rd
Toro Creek Rd
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


2
Toro Creek Rd
Toro Creek Rd
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap


3
Toro Creek Rd
Toro Creek Rd
263
Toro Creek Rd
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
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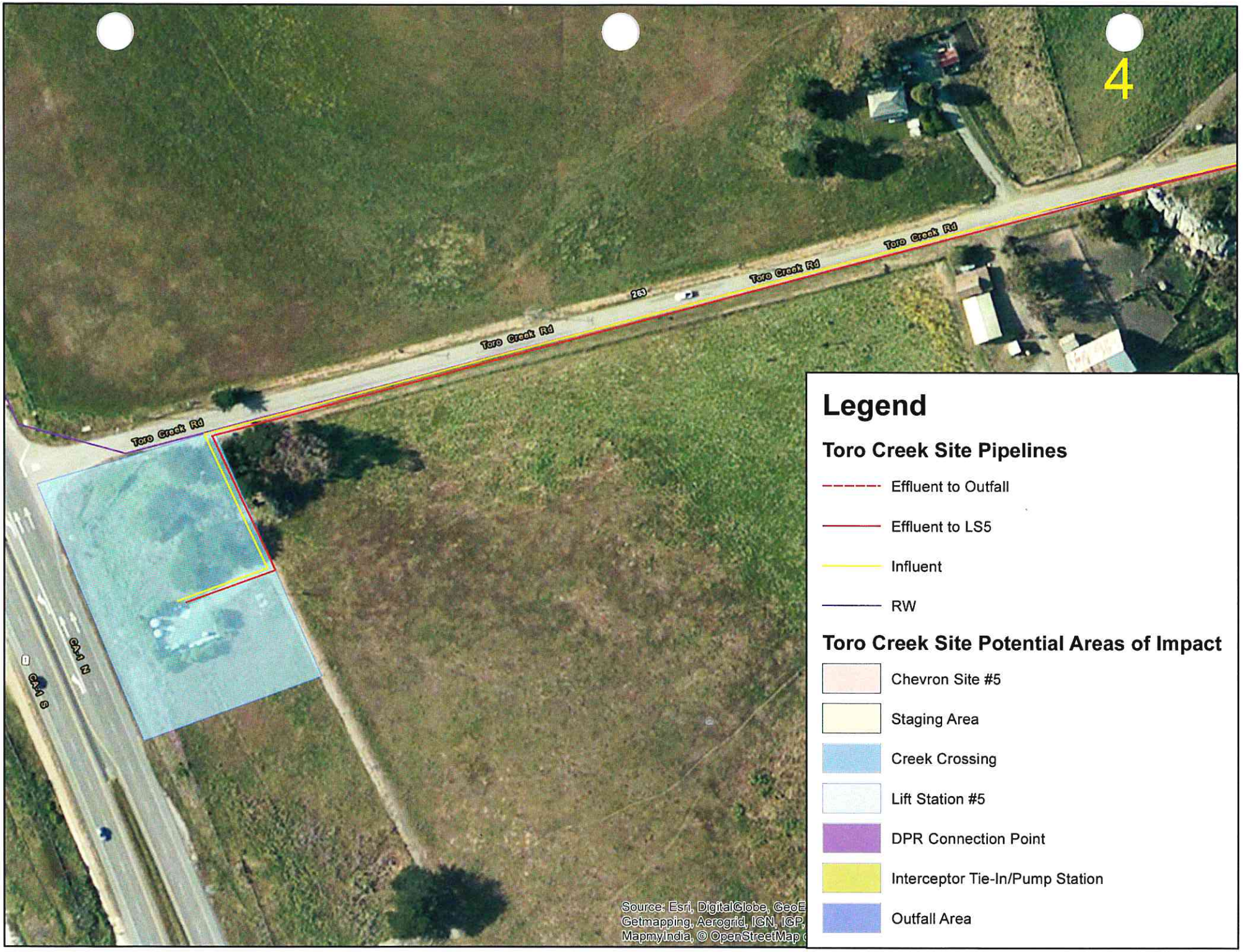
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Toro Creek Rd
Toro Creek Rd
Toro Creek Rd
Toro Creek Rd
263
CA-1 N
CA-1 S
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
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Chevron Site #5
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Creek Crossing
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DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap


5
CA-1 S
CA-1 N
CA-1 S
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
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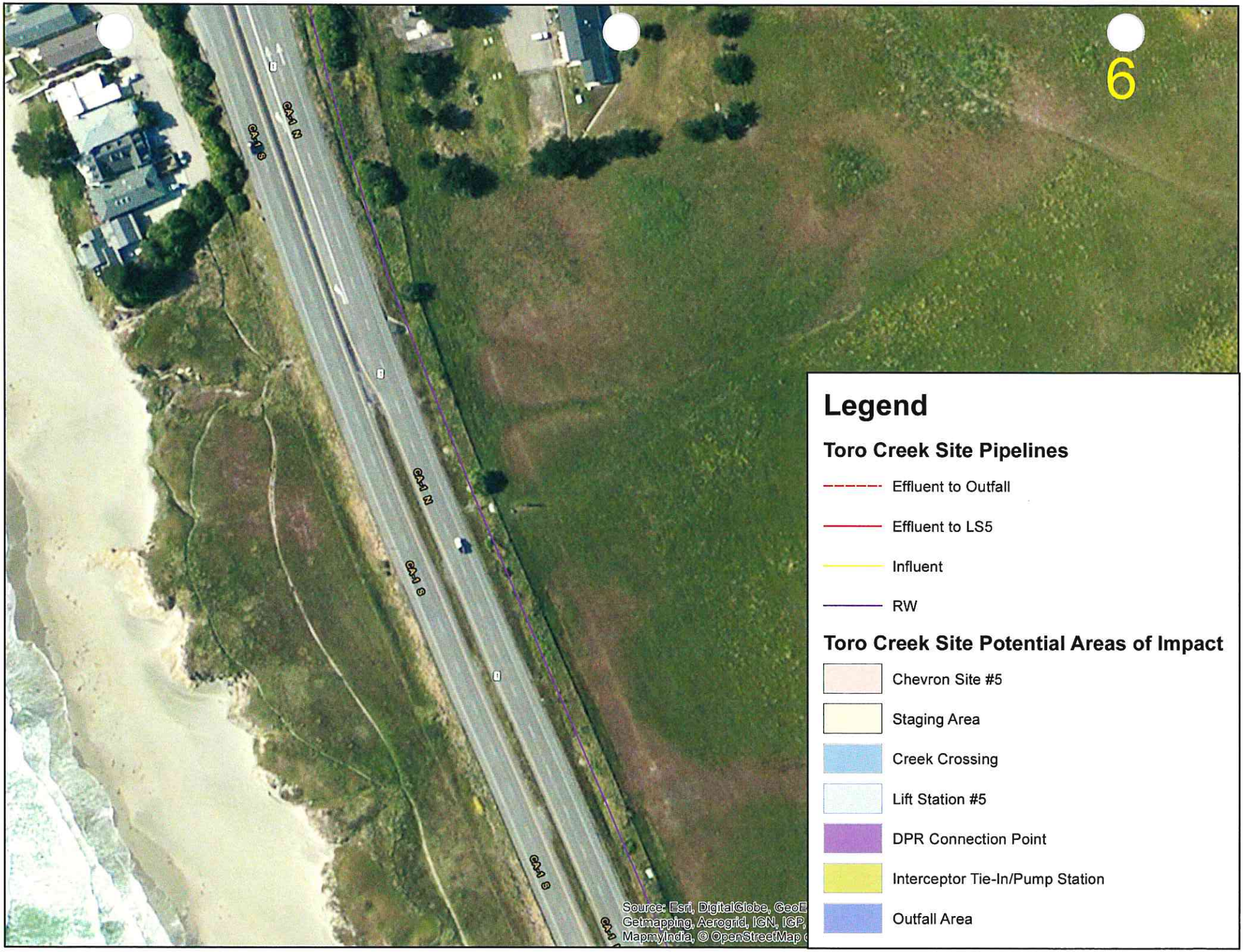
Outfall Area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CA-1 S
CA-1 N
CA-1 S
CA-1 S
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
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Effluent to LS5
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Creek Crossing
Lift Station #5
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Interceptor Tie-In/Pump Station
Outfall Area


7
Ocean Blvd
Shearer Ave
Gilbert Ave
Rapf Ave
Mannix Ave
Studio Dr
Haines Ave
Cody Ave
Davies Ave
Chaney Ave
CA-1 N
CA-1 S
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


8
Del Mar Ave
Shearer Ave
Gilbert Ave
Ocean Blvd
Coronado Ave
Studio Dr
Benita Ave
Acacia Ave
Thalberg Ave
CA-1 S
CA-1 N
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


9
Old Creek Rd
Ocean Blvd
Hacienda Dr
Shearer Ave
Gilbert Ave
Cerro Gordo Ave
El Sereno Ave
Flores Ave
CA-1 N
CA-1 S
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
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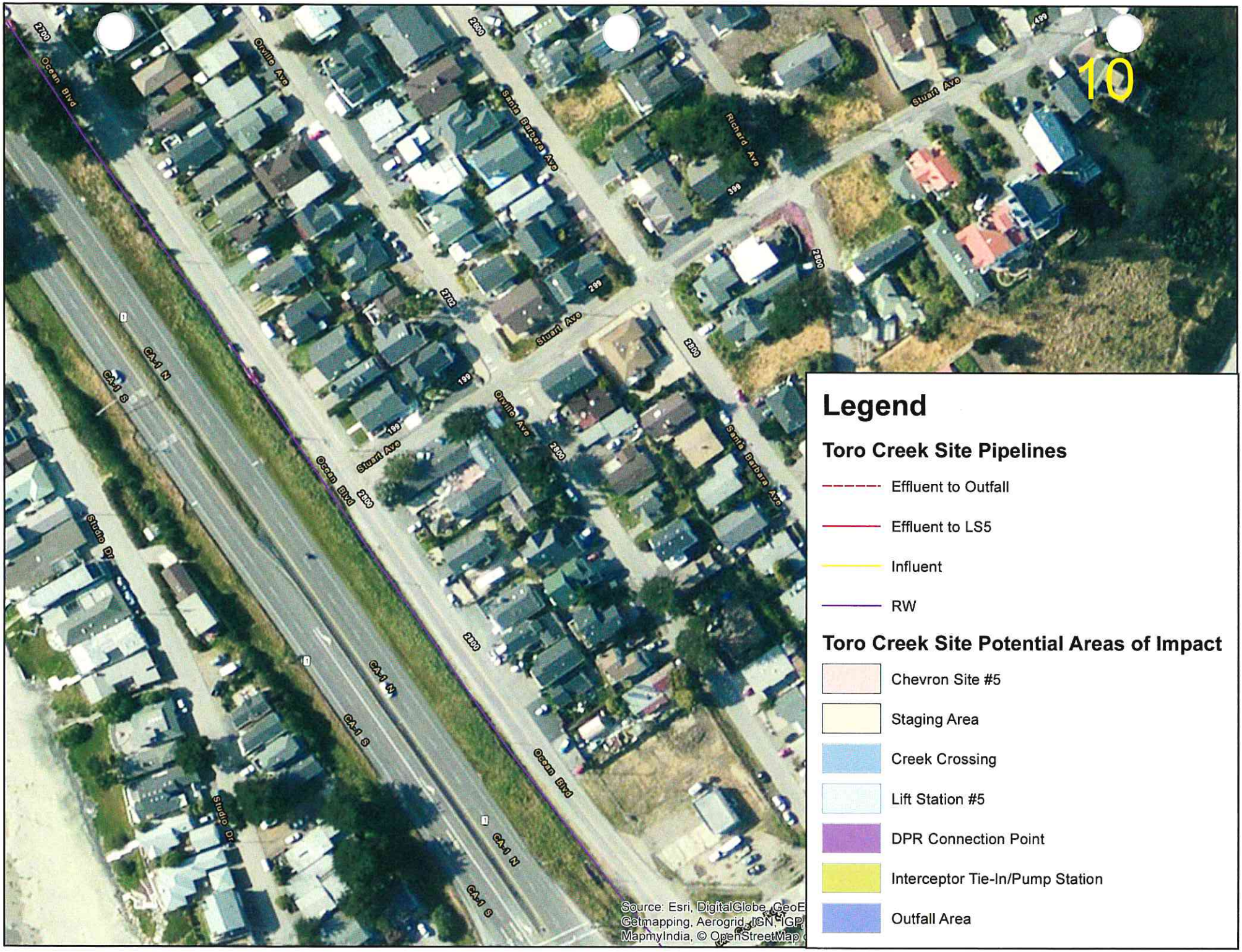
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Ocean Blvd
Orville Ave
Santa Barbara Ave
Stuart Ave
Richard Ave
CA-1 N
CA-1 S
Studio Dr
2700
2800
2900
499
399
299
199
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


11
Ocean Blvd
CA-1 S
CA-1 N
Studio Dr
2400
Obispo Ave
199
2600
Richard Ave
Orville Ave
Santa Barbara Ave
Hidalgo Ave
2644
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


12
Cass Ave
24th St
Ocean Blvd
CA-1 S
CA-1 S
CA-1 N
Ocean Blvd
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
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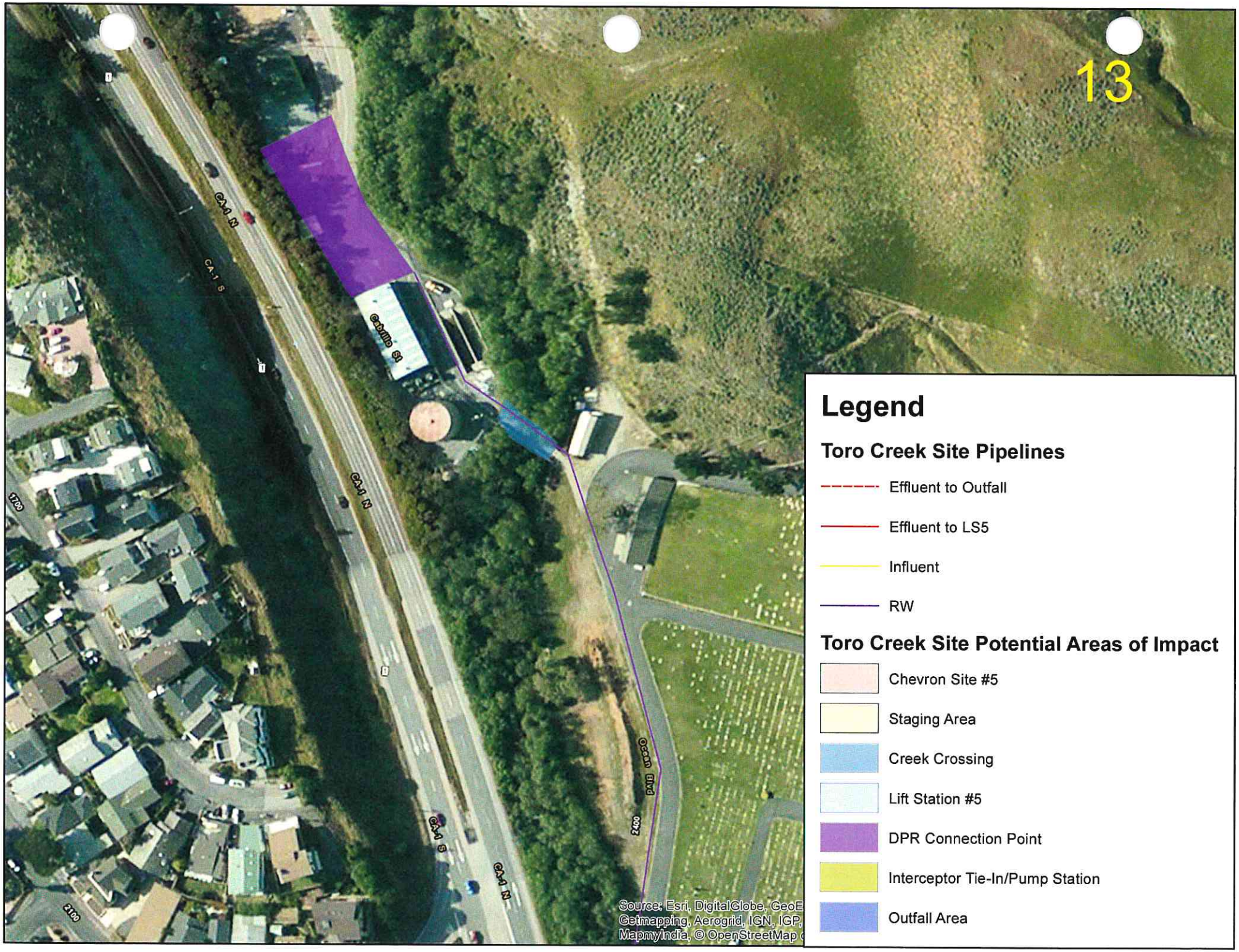
Outfall Area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CA-1 N
CA-1 S
Cabrillo St
1700
2100
2400
Ocean Ave
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Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


14
Hatteras St
Coral Ave
Easter St
Damar St
Capri St
Main St
CA-1 N
CA-1 S
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


15
Ball St
Andres St
Sienna St
Terra St
Coral Ave
San Jacinto St
Sequoia St
Main St
Alder Ave
Birch Ave
Cedar Ave
Dogwood Ave
Elm Ave
Fir Ave
CA-1 N
CA-1 S
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


16
Indigo Cir
Coral Ave
CA-1 N
CA-1 S
Main St
San Joaquin St
Birch Ave
Alder Ave
Cedar Ave
Dogwood Ave
Elm Ave
Fir Ave
Lions St
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap


17
Coral Ave
Main St
CA-1 N
CA-1 S
Pico St
Elm Ave
Las Vegas St
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


18
Bonita St
La Jolla St
Main St
CA-1 N
CA-1 S
Emerald Cir
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
Effluent to LS5
Influent
RW
Toro Creek Site Potential Areas of Impact
Chevron Site #5
Staging Area
Creek Crossing
Lift Station #5
DPR Connection Point
Interceptor Tie-In/Pump Station
Outfall Area


19
CA-1 N
CA-1 S
Main St
Hill St
Seaview Ave
Bayview Ave
Source: Esri, DigitalGlobe, GeoE
Getmapping, Aerogrid, IGN, IGP,
MapmyIndia, © OpenStreetMap
Legend
Toro Creek Site Pipelines
Effluent to Outfall
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Outfall Area

Legend

Toro Creek Site Pipelines

- Effluent to Outfall
- Effluent to LS5
- Influent
- RW

Toro Creek Site Potential Areas of Impact

- Chevron Site #5
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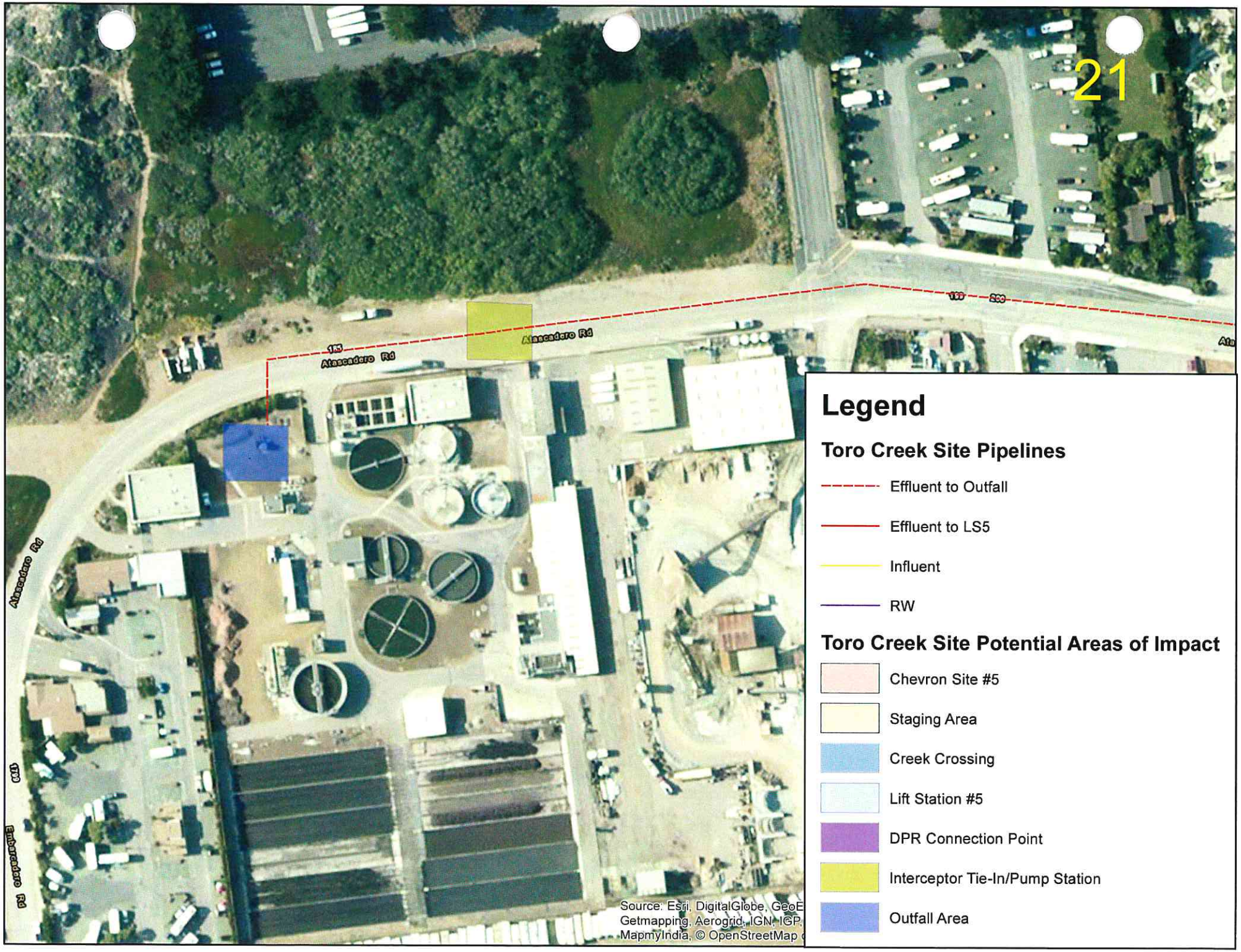

Legend

Toro Creek Site Pipelines

- Effluent to Outfall
- Effluent to LS5
- Influent
- RW

Toro Creek Site Potential Areas of Impact

- Chevron Site #5
- Staging Area
- Creek Crossing
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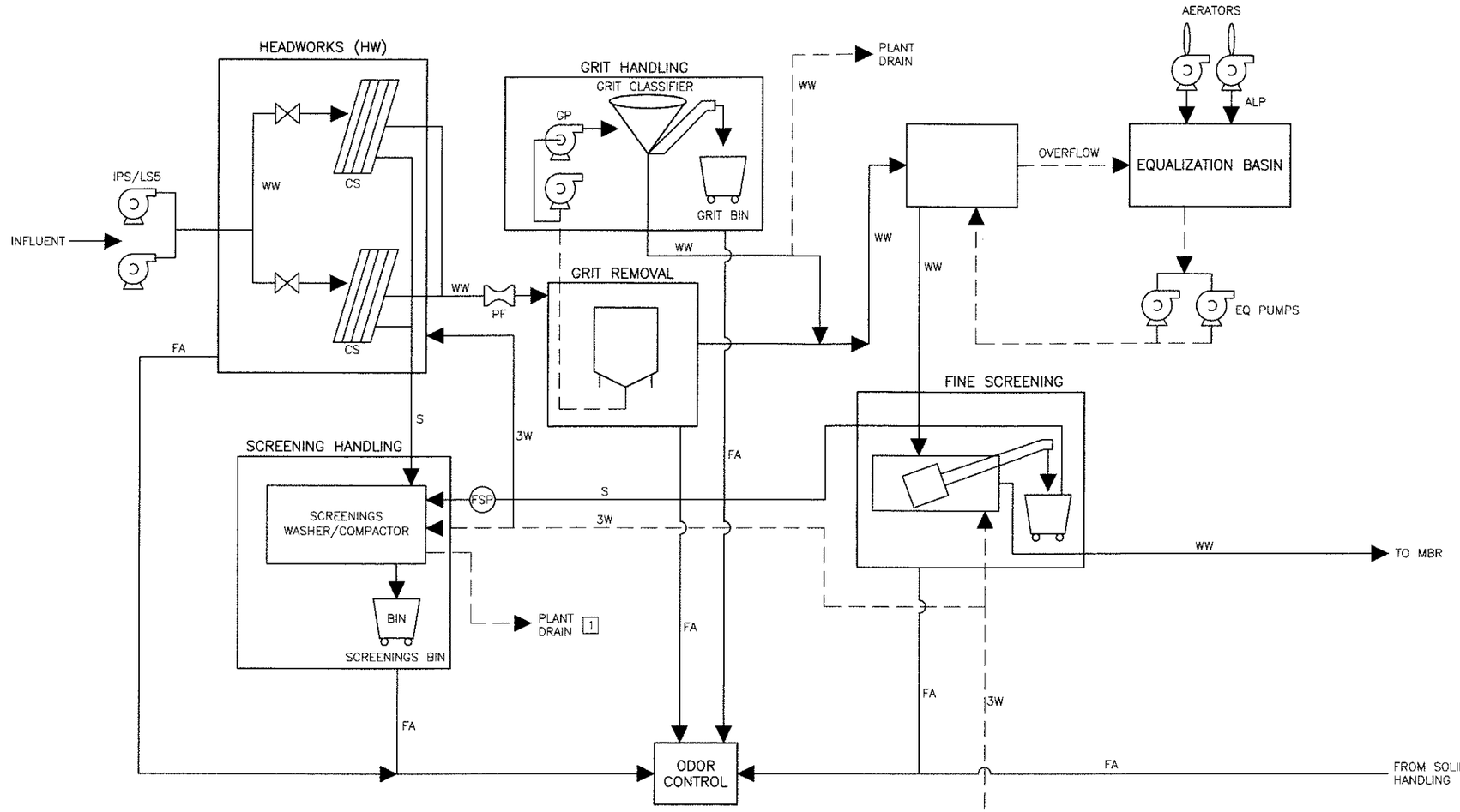
- Outfall Area

Appendix B Process Flow Diagram



LEGEND

- – – – – RETURN LINE EQUALIZATION FLOW

NOTES:

1. PLANT DRAIN WILL RETURN FLOW UPSTREAM OF COARSE SCREENS

ABBREVIATIONS:

AD	= AEROBIC DIGESTION	RAS	= RECYCLED ACTIVATED SLUDGE
ALP	= PROCESS AIR	RDT	= ROTARY DRUM THICKENER
ASB	= AIR SCOUR BLOWER	RW	= RECYCLED WATER
CS	= COURSE SCREEN	RWPS	= RECYCLED WATER PUMP STATION
DF	= DEWATERING FILTRATE	S	= SCREENINGS
EPS	= EFFLUENT PUMP STATION	SP	= SCREENING PUMP
EQ	= EQUALIZATION	TF	= THICKENER FILTRATE
FA	= FOUL AIR	WAS	= WASTE ACTIVATED SLUDGE
FM	= FLOW METER	2WP	= POTABLE WATER (WHEN NO 3W)
FSP	= FINE SCREENINGS PUMP	3W	= NON-POTABLE WATER
GP	= GRIT PUMP	3WP	= 3W PUMP
HW	= HEADWORS		
IPS/LS5	= INFLUENT PS		
PB	= PROCESS BLOWER		
PE	= PRIMARY EFFLUENT		
PER	= PERMEATE		
PF	= PARSHALL FLUME		
PP	= PERMEATE PUMP		

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WSC WATER SYSTEMS CONSULTING, INC.
3765 S. HIGUERA, SUITE 102
SAN LUIS OBISPO, CA 93401
PH: (805)457-8833 FAX: (805)888-2764

CAYUCOS SANITARY DISTRICT
ADDRESS
APPROVED: DIVISION CHIEF ENGINEER DATE
APPROVED: GENERAL MANAGER DATE

CAYUCOS SUSTAINABLE WATER PROJECT
WATER RECYCLING FACILITY

FLOW DIAGRAM SCHEMATIC

SHEET G-4
SHEET 5 OF
PROJECT #

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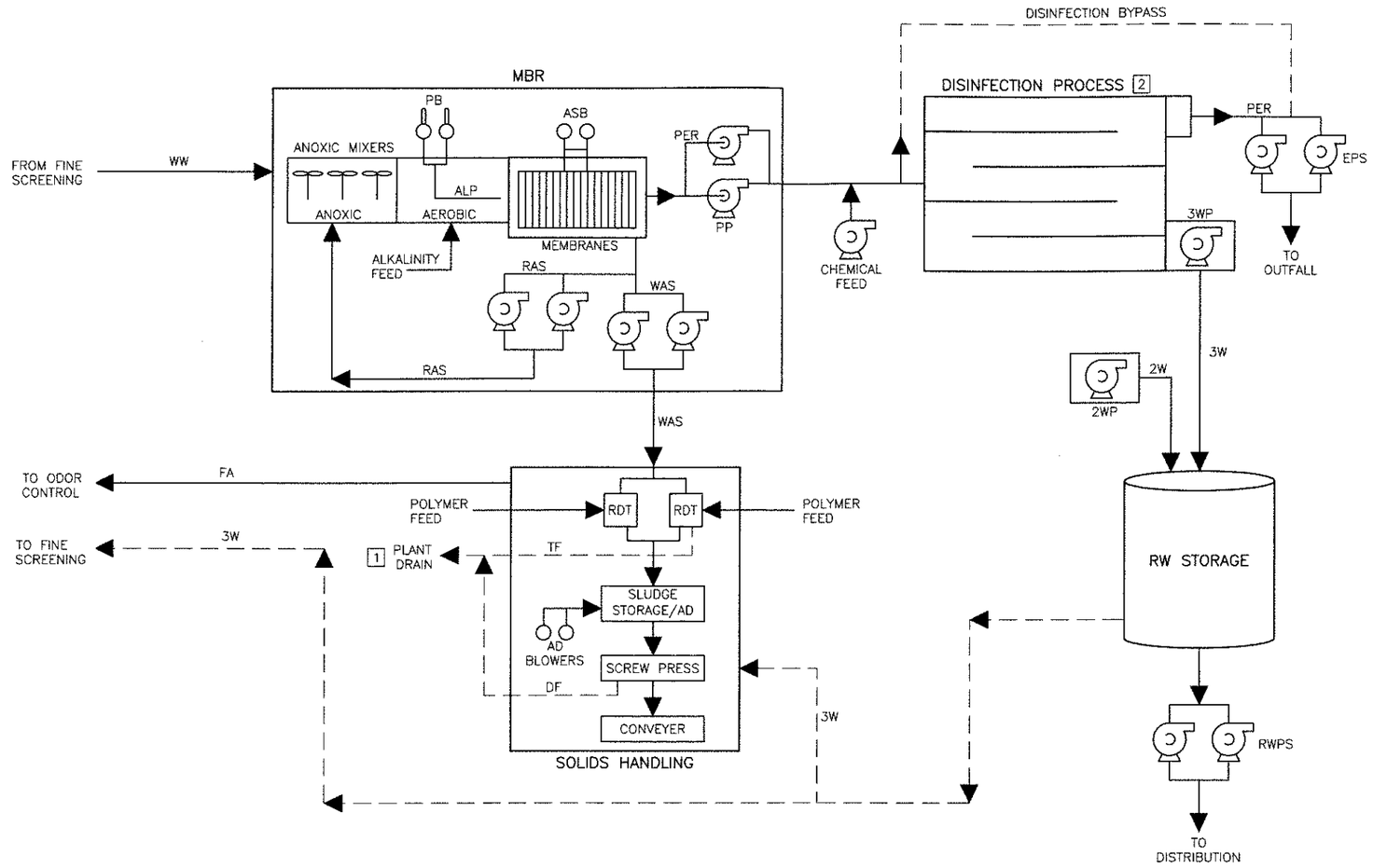

LEGEND

RETURN LINE
EQUALIZATION FLOW

NOTES:

1. PLANT DRAIN WILL RETURN FLOW UPSTREAM OF COARSE SCREENS
2. DISINFECTION PROCESS WILL BE CHLORINATION OR UV DISINFECTION

ABBREVIATIONS:

AD	= AEROBIC DIGESTION	RAS	= RECYCLED ACTIVATED SLUDGE
ALP	= PROCESS AIR	RDT	= ROTARY DRUM THICKENER
ASB	= AIR SCOUR BLOWER	RW	= RECYCLED WATER
CS	= COURSE SCREEN	RWPS	= RECYCLED WATER PUMP STATION
DF	= DEWATERING FILTRATE	S	= SCREENINGS
EPS	= EFFLUENT PUMP STATION	SP	= SCREENING PUMP
EQ	= EQUALIZATION	TF	= THICKENER FILTRATE
FA	= FOUL AIR	WAS	= WASTE ACTIVATED SLUDGE
FM	= FLOW METER	2WP	= POTABLE WATER (WHEN NO 3W)
FSP	= FINE SCREENINGS PUMP	3W	= NON-POTABLE WATER
GP	= GRIT PUMP	3WP	= 3W PUMP
HW	= HEADWORS		
IPS/LS5	= INFLUENT PS		
PB	= PROCESS BLOWER		
PE	= PRIMARY EFFLUENT		
PER	= PERMEATE		
PF	= PARSHALL FLUME		
PP	= PERMEATE PUMP		

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APPROVED: GENERAL MANAGER DATE

CAYUCOS SUSTAINABLE WATER PROJECT
WATER RECYCLING FACILITY

FLOW DIAGRAM SCHEMATIC

SHEET G-5
SHEET 6 OF
PROJECT #

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Appendix C Biological Assessment

Biological Assessment

for

Cayucos Sustainable Water Project

San Luis Obispo, CA

Prepared for

Cayucos Sanitary District
200 Ash Ave.
Cayucos, CA 93430

by

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December 2016

907.01

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Cover Page: Toro Creek, facing north east. Photo taken April 15, 2016.

1.0 Introduction

This Biological Assessment (BA) provides information regarding plant and wildlife species currently listed, candidate, or proposed for listing under the federal Endangered Species Act (ESA) that occur or could occur on lands associated with the Cayucos Sustainable Water Project development project (Project) located along Toro Creek Road, approximately 0.6 mile inland from State Route 1, in San Luis Obispo County, California. On behalf of Cayucos Sanitary District (Applicant), Althouse and Meade, Inc. conducted botanical and wildlife surveys specific to this Project from October 2015 through June 2016.

The Project site is situated in an area that may support federally listed species. Provided herein is a review of the known federally listed species reported from the vicinity, descriptions of those federally listed species with potential to be affected by the Project, a brief review of anticipated potential impacts, and recommended measures to minimize or avoid potential impacts to listed species.

The purpose of this report is to provide federal agencies with information regarding federally listed species that could potentially be affected by the Project. This information is intended to support the Applicant with the initiation of federal Endangered Species Act (ESA) Section 7 consultation between the US Department of Agriculture (USDA) and the U.S. Fish and Wildlife Service (USFWS) for the Project as part of the Water and Wastewater Disposal Program of USDA's Rural Development Programs.

1.1 Species Considered in this Document

The Project (described in Section 2.0) could potentially affect three species listed under the federal ESA. The Action Area (defined in Section 3.0) includes designated critical habitat for these listed three species, all associated with Toro Creek. Listed species potentially affected:

1. **Tidewater Goby** (*Eucyclogobius newberryi)*: Federal Endangered
2. **South-Central California Coast Steelhead** (*Oncorhynchus mykiss irideus*): Federal Threatened
3. **California Red-legged Frog** (*Rana draytonii*): Federal Threatened

The Action Area is defined and described in Section 3.0. Section 4.0 lists all federally listed species reported from the region, and an analysis regarding those with potential to occur in the Action Area. Section 5.0 provides detailed discussions of the two federally listed species listed above that occur or could occur in the Action Area. Avoidance and Minimization Measures are provided in Section 6.0. Section 7.0 provides a brief summary of potential impacts to listed species.

Appendix A contains tables of plants and animals detected in the vicinity of the Project site during field surveys from 2015 and 2016.

Appendix B provides a summary of federally-listed species reported from the region that were not detected within or near the Action Area and for which the Project would have "No Effect" for ESA purposes.

1.2 Summary of Effects Determinations

Based on the analysis contained in this BA, the Project is not likely to adversely affect tidewater goby, steelhead, or California red-legged frog (Table 1).

Tidewater goby has been documented in Toro Creek, and the proposed Project footprint crosses critical habitat located within lower Toro Creek. Steelhead are known to occur in Toro Creek, and steelhead fry were observed there in 2015 surveys. Sedimentation from ground disturbing activities close to Toro Creek could impact steelhead or tidewater gobies in the creek or their critical habitat. Measures designed to avoid direct impacts and minimize indirect impacts to steelhead and gobies and designated critical habitat have been incorporated into the Project. The proposed Project is not likely to adversely affect steelhead or tidewater goby, and will not cause adverse modification of designated critical habitat for either species.

California red-legged frog has been documented in Toro Creek, and the Action Area occurs almost entirely within critical habitat. Measures designed to avoid direct impacts and minimize indirect impacts will avoid potential impacts to Toro Creek and California red-legged frog critical habitat. Exclusion fences put in place at the edges of the project will minimize accidental take of frogs moving through upland habitat. California red-legged frogs are not likely to be adversely affected by the proposed Project, and will not cause adverse modification of designated critical habitat.

TABLE 1. SUMMARY OF EFFECTS DETERMINATIONS.

Species	Listing Status	Effects Determination
Tidewater Goby	ESA Endangered	Not Likely to Adversely Affect
South-Central California Coast Steelhead	ESA Threatened	Not Likely To Adversely Affect
California Red-legged Frog	ESA Threatened	Not Likely to Adversely Affect

1.1 Section 7 Consultation History

Section 7 consultation has not been initiated for this proposed Project as of the date of this document.

2.0 Project Information

2.1 Location of Project

The Project is located along Toro Creek Road approximately 0.6 mile inland from State Route 1, in Toro Creek Valley in an unincorporated area of San Luis Obispo County (Figure 1). The Project footprint is approximately 5 acres, situated on a 769-acre parcel (APN 073-092-003) owned by the Applicant. The Project area is surrounded by agricultural land used for farming and grazing (Figure 2). The City of Cayucos is to the northwest while the City of Morro Bay is to the south. Approximate coordinates for the center of the Project area (APN 073-092-003) are N39° 25' 11" / W120° 51' 47" (WGS84) in the Morro Bay North United States Geological

Survey (USGS) 7.5' topographic quad. Elevation ranges from approximately 60 to 100 feet above mean sea level. The project is outside of the Coastal Zone.

2.2 Project Description

The Applicant proposes a 9.62-acre area supporting a Water Resource Recovery Facility (WRRF) and conveyance infrastructure to serve the community of Cayucos. The WRRF site would be 8 acres, and will include water treatment process infrastructure as well as supporting facilities including offices, potable water system, laboratory, generator building, fences, solar panels, spill prevention structures, a spill containment basin, and landscape screening. The collection and conveyance infrastructure will consist of pipelines conveying influent, treated wastewater, and effluent. The conveyance infrastructure will lie within public rights of way along Toro Creek Road, State Route 1, Ocean Boulevard, Main Street in Morro Bay, Highway 41 in Morro Bay, and any others that are deemed necessary.

Construction laydown areas for the WRRF will be located on the east side of Toro Creek Road, within the area that will ultimately have solar arrays installed. The arrays will be installed after the staging area is no longer needed. Construction will not impact the existing seasonal drainage which was historically modified into an agricultural ditch that flows across the project site. This drainage will not be filled or modified. Equipment used for the construction of the conveyance pipelines will be staged on paved road areas or along road shoulders. The pipelines will be hung from an existing bridge in pipe conduit. The conduit will be mounted on concrete abutments on each side of the creek outside the top-of bank of the channel. The conduit will be placed with crane equipment, no ground disturbing work will take place within the channel. The pipe will be placed as close to the existing bridge as practical. The conveyance infrastructure that will be constructed in Cayucos and Morro Bay will cross three creeks: Old Creek in Cayucos (via Cabrillo Street), Willow Creek in Cayucos (via State Route 1), and Alva Paul Creek in Morro Bay (via State Route 1). The pipeline will be constructed adjacent to existing road bridges outside top of bank and no ground disturbing activities will occur in any of the creek channels.

3.0 Action Area

The Action Area (i.e., all areas that could be affected directly or indirectly by Project implementation) evaluated in this BA comprises a 5 acre area located 0.6 mile inland from State Route 1 in an unincorporated area of San Luis Obispo County between Morro Bay and Cayucos, California, as well as approximately 1 mile of lower Toro Creek. Toro Creek lies approximately 300 feet from the proposed Project footprint, and the conveyance pipeline will cross Toro Creek using an existing road bridge (Figures 1 and 2). Not included within the Action Area are 24,800 linear feet of conveyance pipeline that will be built within developed areas of Cayucos and Morro Bay. Construction of the conveyance pipeline in Cayucos and Morro Bay, including creek crossings over Old Creek, Willow Creek, and Alva Paul Creek, will have no impact on listed species.

3.1 Environmental Baseline

The Project site is approximately 0.6 miles east of State Route 1 along Toro Creek Road. The site is bordered on the west by Toro Creek Road. Approximately 300 feet west of Toro Creek Road lies Toro Creek, a perennial stream. The land east of Toro Creek Road is composed of active agricultural land bordered by ruderal vegetation, dominated by non-native annual grasses such as ripgut brome (*Bromus diandrus*) and non-native forbs. The agricultural field is surrounded by barbed wire fence. Rock outcroppings on the adjacent hills to the northeast and south indicate a serpentine influence in the soils in the site. At the southern tip of the agricultural field, on the toe of the slope, there is a small patch of habitat that shows similarities to the uphill native grassland habitat. Additionally, this agricultural field is bisected by a man-made agricultural ditch which conveys storm flows from an existing natural drainage on the slope above the site in a northwest direction toward Toro Creek. There is no riparian habitat in the agricultural ditch, which likely only holds water during heavy rain events. Because the ditch is a historic modification of a natural drainage, it may be considered potential waters of the U.S. There is a small patch of riparian habitat at the eastern edge of the agricultural field where the natural drainage flows into the man-made ditch. On the west side of Toro Creek Road, the land is split into two separate fields divided by a barbed wire fence. The field to the south shows signs of recent grazing and is made up entirely of annual grassland dominated by non-native grasses. The field to the north is an active agricultural field.

Access to the Project site is from Toro Creek Road, which crosses Toro Creek by bridge southwest of the Study Area.

3.2 Habitat Type Descriptions

Six habitat types are found within the Action Area: agricultural, willow riparian, California annual grassland, developed, ruderal, and eucalyptus (Figure 3).

3.2.1 Agricultural Lands

The majority of the Action Area is covered by agricultural land. Currently agricultural land at the site consists entirely of oat/barley hay fields. During October 2015, the field on the southeast side of Toro Creek Road was being used to grow a variety of crops.

3.2.2 Willow Riparian

Toro Creek is a perennial stream that runs outside the western edge of the Action Area, flowing southwest under State Route 1 into the Pacific Ocean. This riparian corridor is dominated by arroyo willow (*Salix lasiolepis*), California sycamore (*Platanus racemosa*), and Fremont's cottonwood (*Populus fremontii*). The understory is a dense mixture of poison oak, stinging nettle (*Urtica dioica* ssp. *holosericea*), and California mugwort (*Artemisia douglasiana*), along with other shrubs and forbs. The creek is flowing and has a mix of cobblestone and sandy bottom.

A second, small patch of willow riparian habitat is found on the far eastern side of the Project site. At this point, a historic drainage from the slope above the agricultural field enters the field. The canopy is dominated by arroyo willow with a sparse understory. A deep cut from past flows is visible underneath the canopy and dissipates at the point of transition from willow riparian to ruderal vegetation in the agricultural ditch.

3.2.3 California Annual Grassland

California annual grassland within the Action Area consists of flat pasture grazed by cattle on the northwest side of Toro Creek Road, and a toe slope leading down to the southern end of the agricultural field on the southeast side of the road. The vegetation in the pasture is dominated by non-native grasses and forbs. On the toe slope, vegetation is still dominated by non-native grasses, primarily ripgut brome, but there is a stronger presence of native bunchgrass, Nevada bluegrass (*Poa secunda*), and native forbs, including club-haired Mariposa lily (*Calochortus clavatus* var. *clavatus*), a CNPS List 4.3 species of concern. This habitat is a transitional zone between the ruderal, weedy habitat bordering the agricultural field and the native grassland upslope.

3.2.4 Developed

Developed habitat within the Action Area includes Toro Creek Road, where the conveyance pipelines will be installed between the Water Resource Recovery Facility and State Route 1.

3.2.5 Ruderal

Ruderal vegetation in the Project site consists of weedy, non-native vegetation bordering the agricultural field on the southeast side of Toro Creek Road and along Toro Creek Road itself. This habitat is dominated by non-native grasses and forbs with scattered California coffeeberry (*Frangula californica*) shrubs. There is a man-made ditch that bisects the agricultural field that

conveys storm water during large rain events from the historic drainage upslope to Toro Creek, across the road. This drainage displays the same ruderal vegetative characteristics as the bordering habitat.

3.2.6 Eucalyptus

A stand of blue gum eucalyptus (*Eucalyptus globulus*) is located in the riparian corridor where Toro Creek Road crosses Toro Creek. The stand is bisected by the road. There is little to no understory vegetation.

4.0 Federally Listed Species

This BA includes detailed information regarding federally listed species that occur or could occur within the Action Area. Information presented here is based on a records review of federally listed species reported from the nine USGS quadrangles that surround the Project. Records that were reviewed came from the California Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS), and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California. The search area includes the Atascadero, Cambria, Cayucos, Cypress Mountain, Morro Bay North, Morro Bay South, San Luis Obispo, Templeton, and York Mountain NE USGS 7.5 minute quadrangles.

Figure 4 depicts the current GIS data for federally listed species and critical habitat mapped in the vicinity of the Action Area by the CNDDB and USFWS.

4.1 Federally Listed Species that May Be Affected by the Project

Three federally listed species are known to occur or have the potential to occur in the Action Area, and could potentially be affected by the Project (Table 2).

Tidewater goby is a federally listed endangered species known to occur in coastal streams and rivers in San Luis Obispo County, including Toro Creek. Tidewater gobies have been detected in the willow-lined lower creek portions of Toro Creek when a lagoon develops at the creek mouth (CNDDB #95). The lower portion of Toro Creek from just north of the Toro Creek Road bridge to the mouth of the creek is designated as critical habitat for tidewater goby. Protective measures would be implemented to avoid effects to tidewater goby and designated critical habitat.

California red-legged frog is a federally listed threatened species known from sporadic occurrences documented throughout San Luis Obispo County. Toro Creek is known to harbor red-legged frogs (CNDDB #247), and they may move out of Toro Creek and into upland habitat within the Action Area during the non-breeding season. Much of the Action Area lies within designated critical habitat for this species. Protective measures would be implemented to avoid effects to California red-legged frog and designated critical habitat.

Steelhead is a federally listed threatened species known to occur in coastal streams and rivers in San Luis Obispo County, including Toro Creek. Steelhead of multiple age classes have been documented in Toro creek, and surveys in 2015 found steelhead fry, indicating that Toro Creek contains suitable spawning habitat. Toro Creek is designated as critical habitat for steelhead.

Protective measures would be implemented to avoid effects to steelhead and designated critical habitat.

TABLE 2. FEDERAL LISTED SPECIES THAT OCCUR IN THE REGION. Three species are listed in this table that are governed by the ESA, and have the potential to occur within the Action Area and could be affected by the Project if present.

Common and Scientific Names	Federal/State CDFW	Breeding Period	Habitat Preference	Potential Habitat in Action Area?	Observed On-site?
Tidewater Goby *Eucyclogobius newberryi*	FE/None SSC	n/a	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Yes. Toro Creek is adjacent to the Project site and is designated as critical habitat.	No
Steelhead - South/Central California Coast DPS *Oncorhynchus mykissirideus irideus*	FT/None SSC	February - April	Federal listing refers to runs in coastal basins from Pajaro River south to, but not including, the Santa Maria River.	Yes. Toro Creek is adjacent to the Project site and is designated as critical habitat.	Yes
California Red-legged Frog *Rana draytonii*	FT/None SSC	January - November	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks for larval development.	Yes. Appropriate creek habitat is present adjacent to site and project site is within critical habitat.	No

Abbreviations:
FE: Federal Endangered
FT: Federal Threatened
SSC: CDFW Species of Special Concern

5.0 Species Accounts

Species accounts for the three species listed above that occur or have the potential to occur within the Action Area are provided below. Avoidance and Minimization Measures are provided in Section 6.0. Effects Determinations are provided in Section 7.0. California Natural Diversity Database (CNDDB) citations are given as the occurrence number for the species under discussion.

5.1 Tidewater Goby

Listing Status

The tidewater goby (*Eucyclogobius newberryi*) is listed as a threatened species under the federal Endangered Species Act; it has no state listing status.

Species Biology

Tidewater goby are relatively small (usually less than 50 mm), with large pectoral fins and pelvic fins that join to form an abdominal disc (USFWS 2011). Males are nearly transparent while females are generally darker on the body and dorsal and anal fins. Tidewater gobies are found only in California, living in generally brackish water of coastal lagoons, estuaries, marshes, and the lowest reaches of coastal streams. They occur along the coast from the Smith River near the Oregon border to Agua Hedionda Lagoon in San Diego County. Preferred habitat includes salinities of less than 10 ppt, temperatures of 8 °C to 25 °C, and well-oxygenated waters (Moyle 2002). They are not present in areas where steep, rocky substrate occurs without coastal beaches and estuaries. If extirpated from a site, tidewater gobies can recolonize previously occupied habitats when environmental conditions are restored and individuals repopulate the area, often through natural or human-induced efforts (USFWS 2011). Tidewater gobies have been documented in lower Toro Creek near the creek mouth when a lagoon is present (CNDDB #95). Lower Toro Creek is designated as critical habitat for tidewater goby (Figure 4).

Tidewater gobies generally live for one year, though rare exceptions have been noted. Local populations can range from a few to several thousand individuals (USFWS 2011). Reproduction can occur year round, but generally peaks in April and May (USEPA 2010; USFWS 2011). Males dig a burrow 10 to 20 cm deep in course sand. Females lay 300 to 500 eggs that stick to the burrow wall. The male then guards the nest for several days until the young hatch and become pelagic.

Tidewater goby prey includes aquatic insects and small crustaceans such as mysid shrimp and amphipods. They are in turn eaten by steelhead, staghorn sculpin, and wading or diving birds such as herons or mergansers (USEPA 2010). Factors that can adversely impact goby populations include sedimentation, poor habitat management, pollution, breaching lagoon sandbars, and competition with or predation by non-native fish species (Moyle 2002).

Survey Methods

The section of Toro Creek nearest to the area where the agricultural ditch flows into the creek and the section around the first Toro Creek Road bridge were inspected visually during October 2015. Extensive surveys were not conducted and intensive survey methods (dip netting, seining,

snorkeling, etc.) were not undertaken. The lower portion of Toro Creek was not inspected, nor was the area around the creek mouth.

Survey Results

Tidewater goby was not observed in Toro Creek during visual inspections of the site by Althouse and Meade biologists in 2015 and 2016. Tidewater gobies have been documented in lower Toro Creek near the creek mouth (CNDDB #95).

5.2 Steelhead

Listing Status

Steelhead (*Oncorhynchus mykiss irideus*) in the South-Central California Steelhead Distinct Population Segment (DPS) is listed as threatened under the federal Endangered Species Act; it has no state listing status.

Species Biology

Steelhead are the anadromous form of rainbow trout, and are dark olive in color shading to silvery-white on the underside, with a heavily speckled body and a pink to red stripe along their side. They spend the early portion of their life in freshwater, migrate to the sea where they mature, then migrate to fresh water for spawning. They can exceed 30 pounds in northwestern states and Canada, though South-Central California individuals are generally much smaller. The South-Central California DPS includes all naturally spawned anadromous steelhead populations below natural and man-made impassible barriers in streams from the Pajaro River (Monterey County) south to (but not including) the Santa Maria River (Santa Barbara County).

Steelhead primarily feed on drifting aquatic and terrestrial insects, but diet also includes bottom-dwelling invertebrates, amphipods, snails, and small fish. They are opportunistic and will adjust feeding preference as necessitated by local conditions. Preferred habitat consists of cool, clear, fast-flowing streams and rivers where riffles predominate over pools, ample cover exists in the form of riparian vegetation or undercut banks, and where invertebrate life is diverse and abundant (Moyle 2002). Toro Creek is designated as critical habitat for steelhead (Figure 4). Habitat surveys of Toro Creek indicate that it contains good quality spawning habitat (CCC 2000). Steelhead of multiple age classes, including spawning adults, have been documented in previous surveys of Toro Creek (Becker and Reining 2008), and 2015 surveys for the proposed Project documented steelhead fry in the creek.

Steelhead typically enters coastal streams to spawn when high stream flows from winter storms cause sand barriers across coastal lagoons to breach. Like other anadromous salmonids, they are known for returning to the watershed from which they hatched; though straying to other watersheds is not uncommon. Preferred spawning habitat includes course gravel in riffles or pool tales. Females dig a nest in the gravel, using their tail to create a depression free of fine sediment. Males and females spawn with the eggs being deposited in the nest. Adults migrate downstream and leave freshwater if possible, though they can "oversummer" in streams if necessary. After eggs hatch, fry spend 10 to 14 days in the gravel before entering the water column. Stream margins are preferred during early stages due to weak swimming ability, but the fingerlings move into the stream as they grow. Juveniles often migrate to more productive lagoons and estuaries prior to smoltification (a physiological process which allows the fish to

adapt to saline environments prior to entering the ocean). After one to two years in freshwater, steelhead "smolts" enter the ocean and mature. They spend up to four years in the ocean, then return to coastal streams and rivers, waiting for winter rains to breach sand bars so they can repeat the spawning process. Unlike Chinook (*O. tshawytscha*) and other Pacific salmon, steelhead do not necessarily die after spawning, and can survive to spawn in multiple years.

Steelhead face significant and serious threats from the modification of coastal stream and river systems due to water management activities and urban development. Water storage, withdrawal, conveyance, and diversions for agriculture, flood control, and domestic water supply purposes have greatly reduced or eliminated historically accessible habitat, particularly in the larger watersheds. Modification of natural flow regimes by dams and other water control structures have degraded steelhead habitats. Land-use activities associated with urban development, mining, agriculture, ranching, and recreation have significantly altered steelhead habitat quantity and quality (NMFS 2013).

Survey Methods

The section of Toro Creek nearest to the area where the agricultural ditch flows into the creek and the section around the first Toro Creek Road bridge were inspected visually during October 2015. Extensive surveys were not conducted and intensive survey methods (dip netting, seining, snorkeling, etc.) were not undertaken. Steelhead fry were noted in the upstream location, near where the agricultural ditch flows into the creek.

Survey Results

Steelhead fry were detected in Toro Creek during visual inspections of the site by Althouse and Meade biologists in 2015. Steelhead have also been documented in Toro Creek in previous surveys by other agencies, including DFG surveys in 1962 and 1973 and a NMFS survey in 2002 (Becker and Reining 2008). The results of these surveys indicate that Toro Creek provides important spawning habitat for steelhead.

5.3 California Red-legged Frog

Listing Status

California red-legged frog (*Rana draytonii*) is listed as a threatened species under the federal Endangered Species Act; it has no state listing status.

Species Biology

California red-legged frogs (CRLF) are the largest frog native to California. Adult bodies can reach 5 inches in length. Color can be reddish to gray, and the legs may or may not have characteristic red shading. The characteristic identifier of this species is the dorsolateral fold extending from just behind the eye to the joint of the legs, and positioned halfway between the frog's spine and each side.

California red-legged frogs were once quite common throughout the State, occurring from sea level to elevations of about 5,200 feet. It now occurs in only 30 percent of its former range, primarily in coastal drainages of central California from Marin County south to northern Baja California (USFWS 2002). The most significant threat to CRLF is chytrid fungus *(Batroachochytrium dendrobatidis*) (USFWS 2010). Habitat requirements include aquatic

breeding sites mixed with riparian and upland dispersal habitats. California red-legged frogs have been known to migrate up to two miles across upland areas to find nearby water sources. This species has been documented within Toro Creek upstream of the Action Area, approximately 0.2 miles from the proposed Project site (CNDDB #247). The entire Toro Creek watershed north of the first Toro Creek Road crossing has been designated as critical habitat for California red-legged frog (Figure 4).

CRLF generally require seasonal pools or streams that hold water until late summer for successful breeding, which occurs from November through April. Eggs are deposited on emergent vegetation such as rushes, cattails, and other vegetation, with masses containing 2,000 to 5,000 eggs floating on the water surface. Eggs hatch in 6 to 14 days depending on water temperature, with tadpoles developing in 20 to 22 days and terrestrial frogs developing in 11 to 20 weeks (USFWS 2002). Reproduction begins after 2 to 3 years. California red-legged frogs can live for 8 to 10 years, but average lifespan is likely lower (USFWS 2002).

Larval CRLF are thought to graze on algae. Adult frogs primarily consume invertebrates, but small vertebrates including Pacific tree frogs (*Hyla regilla*) and California mice (*Peromyscus californicus*) represent a significant portion of their diet. Foraging occurs along channel shorelines and the water surface, but can also occur several meters into dense riparian areas (USFWS 2002). Adult and subadult frogs feed primarily at night. Factors adversely affecting CRLF include urbanization, habitat fragmentation and degradation, impoundments, and predation by centrarchid fish and bullfrogs (*R. catesbeiana*).

Survey Methods

The section of Toro Creek nearest to the area where the agricultural ditch flows into the creek and the section around the first Toro Creek Road bridge were inspected visually during October 2015. Protocol-level surveys were not conducted, and intensive survey methods (dip netting, seining, snorkeling, etc.) were not undertaken. Creek banks and pools were visually inspected in surveyed areas.

Survey Results

California red-legged frogs were not detected within the Action Area during visual inspections of the site by Althouse and Meade biologists in 2015 and 2016. However, CRLF are known to occur in Toro Creek (CNDDB #895).

6.0 Avoidance and Minimization Measures

Sensitive biological resources may be present within the Action Area. Minimization Measures (MM) below provide avoidance and protection measures for listed species. The following Minimization Measures are recommended to prevent erosion and minimize impacts to Toro Creek and listed aquatic species:

MM-1. Appropriate best management practices (BMPs) shall be utilized at the site to prevent excess sediment from entering Toro Creek. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented by qualified practitioners. Long-term measures identified in the SWPPP will include revegetation, basins, bioswales and infiltration areas, as applicable. A spill containment basin will capture, slow, and

percolate increased post-construction stormwater runoff on the site. Stormwater runoff upstream to the developed site will flow to the basin via the vegetated agricultural ditch, which will not be filled or modified by the project. The basin will also function as a stormwater treatment facility to remove sediments and other deleterious materials from the stormwater before it flows west towards Toro Creek.

MM-2. Check valves will be present on all influent and treated water pipelines near Toro Creek to reduce the risk of spill into Toro Creek in the event of a pipeline break.

MM-3. During construction of the Water Resource Recovery Facility there will be a 300 ft setback from the top of bank of Toro Creek. This will minimize impacts due to sedimentation.

MM-4. During construction of the conveyance pipelines across Toro Creek, no ground disturbing activities will take place within the Toro Creek riparian corridor or within the top of bank channel.

MM-5. The edge of riparian vegetation will be shown on construction plans and boundaries of the work area will be shown on construction plans. Limits of grading will be clearly delineated in the field prior to initiation of construction activities.

MM-6. All hazardous materials required to operate and maintain equipment will be properly used in accordance with manufacturer's specifications.

MM-7. The contractor will follow an approved spill prevention plan, including procedures to ensure that all equipment is properly maintained and free of leaks and all necessary repairs incorporate proper spill containment.

MM-8. Hazardous materials will be properly stored and managed in secured areas located outside of the Toro Creek riparian corridor.

MM-9. Mobile equipment will be staged, repaired, and maintained 300 ft from top of bank of Toro Creek, or on existing paved road surfaces. Fueling of equipment will be conducted in pre-designated areas at least 300 ft from the top of bank drainages, or on existing paved road surfaces. Spill containment materials will be placed around the equipment before refueling. Standing equipment will be outfitted with drip pans and hydrocarbon absorbent pads.

MM-10. Avoid ground disturbing activities during the wet season of the year.

MM-11. Pre-construction surveys for CRLF will be conducted prior to ground disturbance.

MM-12. Prior to start of construction activities, install exclusionary silt fencing to adequately exclude CRLF from the Project area during active construction. Exclusion fences will be checked daily by a biological monitor. The biological monitor(s) shall be qualified to move any CRLF to the nearest suitable habitat away from the Project area as needed.

MM-13. USFWS-approved biological monitor(s) shall document compliance with all best practices and environmental compliance items for the Project. Prior to the start of construction activities in the riparian zone each day, monitor(s) will survey the work areas for CRLF, look under parked vehicles and heavy equipment frequently (especially every morning before work starts). The biological monitor(s) shall be qualified to move

wildlife, including CRLF, from the Project areas to the nearest suitable habitat outside of the Project area as needed.

MM-14. Qualified biologists will brief all Project personnel prior to participating in construction activities. At a minimum, the briefing will include a description of the Project components and techniques, a description of the listed species occurring in the Project area, and the general and specific measures and restrictions to protect the species during implementation of the Project.

MM-15. All trash shall be removed from the site daily or secured in a predator-resistant container to avoid attracting predators to the site.

7.0 Effects Determinations

The Project is not likely to adversely affect any federally listed species.

7.1 Tidewater Goby

Tidewater goby were not observed in Toro Creek during site visits in 2015 or 2016, but have been detected downstream at the mouth of Toro Creek. Suitable habitat for tidewater goby exists only when conditions are right and appropriate lagoon habitat is present. The stretch of Toro Creek from the first Toro Creek Road crossing south to the ocean is designated as critical habitat. There are no proposed impacts to Toro Creek from the proposed Project. There will be no ground disturbance within 300 feet of top of bank of Toro Creek. Appropriate water quality control measures and erosion control BMPs (Section 6.0) incorporated into the Project design will minimize or avoid indirect impacts on downstream tidewater goby and critical habitat due to sedimentation.

Direct Effects

During construction, the potential exists for sediment to wash into Toro Creek. Spills that occur during construction or during operation of the Project could result in impacts to critical habitat or take of sensitive species. Direct effects to tidewater gobies and their habitat will be avoided by minimization measures and BMPs incorporated into the Project design. No work will be done within 300 feet of top of bank. Construction and installation of conveyance structures crossing Toro Creek at the Toro Creek Road bridge will be done from the road and will not result in direct impacts to the creek or to tidewater goby habitat. No direct effects to tidewater gobies are anticipated to occur from the proposed Project.

Indirect Effects

Construction of the project could result in an increase of peak stormwater flow into Toro Creek, or a change in the quality of stormwater flowing into Toro Creek due to pollutant run-off. Indirect effects to tidewater gobies and their habitat will be avoided by minimization measures and BMPs incorporated into the Project design, including a stormwater retention basin.

Effects Determination

Not Likely to Adversely Affect. This is the appropriate effects determination in light of the measures designed to avoid adverse direct and indirect effects.

7.2 Steelhead

Steelhead fry were observed in Toro Creek during surveys conducted in October 2015. Steelhead are known to spawn in Toro Creek, and the creek is designated as critical habitat. There are no proposed impacts to Toro Creek from the proposed Project. There will be no ground disturbance within 300 ft of top of bank of Toro Creek. Appropriate water quality control measures and erosion control BMPs (Section 6.0) incorporated into the Project design will minimize or avoid indirect impacts on downstream steelhead and critical habitat due to sedimentation.

Direct Effects

During construction, the potential exists for sediment to wash into Toro Creek. Spills that occur during construction or during operation of the Project could result in impacts to critical habitat or take of sensitive species. Direct effects to steelhead and their habitat will be avoided by minimization measures and BMPs incorporated into the Project design. No work will be done within 300 feet of top of bank. Construction and installation of conveyance structures crossing Toro Creek at the Toro Creek Road bridge will be done from the road and will not result in direct impacts to the creek or to steelhead habitat. No direct effects to steelhead are anticipated to occur from the proposed Project.

Indirect Effects

Construction of the project could result in an increase of peak stormwater flow into Toro Creek, or a change in the quality of stormwater flowing into Toro Creek due to pollutant run-off. Indirect effects to steelhead and their habitat will be avoided by minimization measures and BMPs incorporated into the Project design, including a stormwater retention basin.

Effects Determination

Not Likely to Adversely Affect. This is the appropriate effects determination in light of the measures designed to avoid adverse direct and indirect effects.

7.3 California Red-legged Frog

California red-legged frogs were not observed in Toro Creek or anywhere else within the Action Area during site visits in 2015 or 2016, but CRLF are known to occur within Toro Creek. The Toro Creek watershed upstream of the first Toro Creek Road crossing is designated as critical habitat. Designated critical habitat for CRLF will not be adversely modified by the proposed Project. There will be no ground disturbance within 300 ft of top of bank of Toro Creek. Exclusion fences will be put in place at the project limits to prevent CRLF from moving into the work area. When active construction is in process, a biologist will conduct frequent monitoring of the work area to avoid and minimize potential impacts to CRLF.

Direct Effects

During construction, the potential exists for California red-legged frogs to be present in upland habitat to be harmed by vehicle traffic or ground disturbing activities. There is also potential for sediment to wash into Toro Creek during construction. Spills that occur during construction or during operation of the Project could result in adverse effects to critical habitat or CRLF. Direct effects to California red-legged frogs and their habitat will be avoided by minimization measures and BMPs incorporated into the Project design. No work will be done within 300 ft of top of bank. Exclusion fences will be installed and the construction site monitored daily for frogs. Construction and installation of conveyance structures crossing Toro Creek at the Toro Creek Road bridge will be done from the road and will not result in direct impacts to the creek or to CRLF habitat. Short-term effects could occur during capture and relocation of CRLF if any are found within or adjacent to the work area during construction. No direct effects to California red-legged frog are anticipated to occur from the proposed Project.

Indirect Effects

Construction of the project could result in an increase of peak stormwater flow into Toro Creek, or a change in the quality of stormwater flowing into Toro Creek due to pollutant run-off. Indirect effects to California red-legged frogs and their habitat will be avoided by minimization measures and BMPs incorporated into the Project design, including a stormwater retention basin. CRLF crossing Toro Creek Road may be have a small increase in roadkill potential due to traffic associated with facility operations.

Effects Determination

Not Likely to Adversely Affect. This is the appropriate effects determination in light of the measures designed to avoid adverse direct and indirect effects.

8.0 Interrelated Actions

No interrelated actions are anticipated to occur near the Action Area that would affect listed species.

9.0 Cumulative Effects

Cumulative effects include the effects of future state, local, or private actions that are reasonably certain to occur in the Action Area considered in this Biological Assessment. Future federal actions that are unrelated to the Project are not considered in determining the cumulative effects because they are subject to separate consultation requirements pursuant to Section 7 of the ESA (U.S. Fish and Wildlife Service and National Marine Fisheries Service 1998).

For this evaluation, the area of consideration for cumulative effects is the Toro Creek watershed, based on the mobility of California red-legged frogs and steelhead. The timeline for this evaluation is one year beginning with the implementation of the proposed Project.

The majority of land within the Toro Creek watershed is privately owned ranchland. We are not aware of any future projects to be conducted by state, local, or private entities within or near the Toro Creek watershed that would affect listed species.

10.0 Conclusion

The Cayucos Sustainable Water Project development Project is not likely to affect any federally listed species. Steelhead were documented in nearby Toro Creek, and there is suitable habitat for California red-legged frog and tidewater goby. BMPs and mitigation measures incorporated into the Project design will avoid impacts to listed species. Adverse modification of tidewater goby, steelhead, or California red-legged frog designated critical habitat is not anticipated.

11.0 References

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12.0 Figures

- Figure 1. USGS Topographic Map
- Figure 2. Aerial Photograph
- Figure 3. Action Area Habitat Map
- Figure 4. CNDDB & USFWS Critical Habitat Map
- Figure 5. Project Impact Map

Figure 1. USGS Topographic Map

Cayucos Sanitary District

Map Updated: November 23, 2016, 02:36 PM

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Figure 2. Aerial

Cayucos Sanitary District

2014 San Luis Obispo County
NAIP Aerial Photography
Map Updated: November 23, 2016, 04:17 PM

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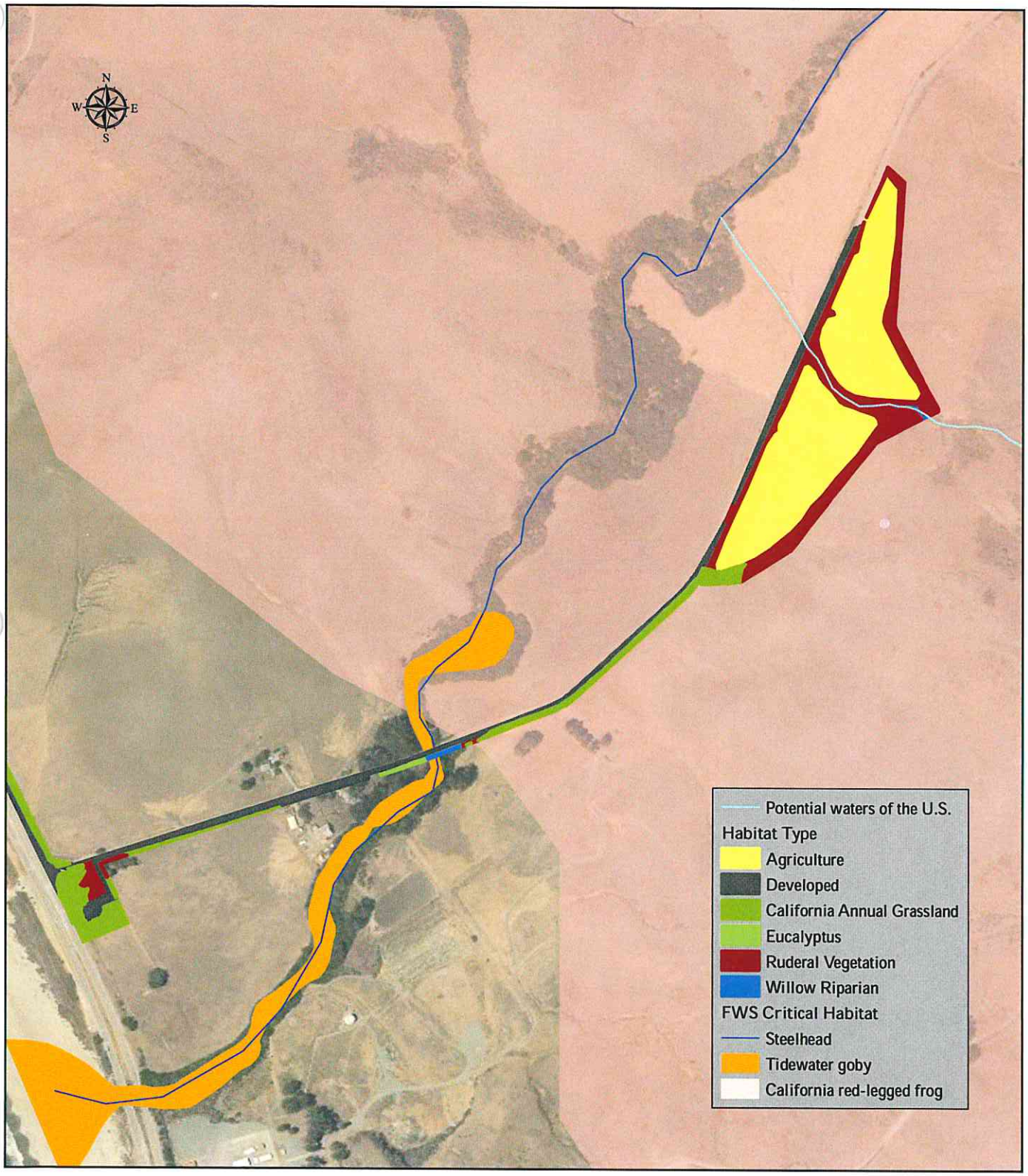
Figure 3. Action Area Habitat Map



Cayucos Sanitary District

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Map Updated: November 23, 2016, 03:50 PM

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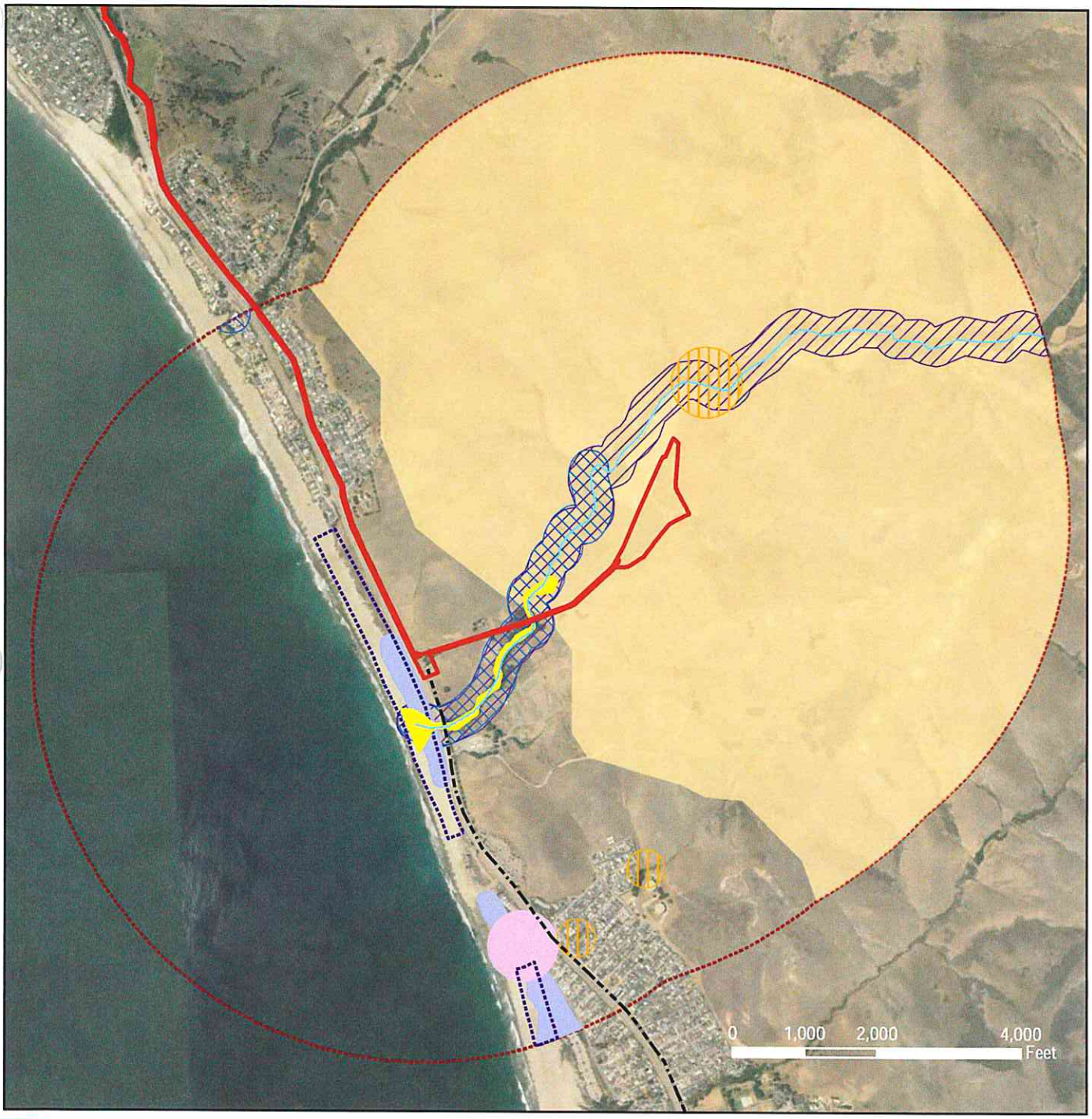
Figure 4. CNDDB & USFWS Critical Habitat Map



Study Area
1 Mile Buffer
Existing Force Main

Critical Habitat
Steelhead
Tidewater goby
Western snowy plover
California red-legged frog

CNDDB
California red-legged frog
California seablite
steelhead - south-central California coast DPS
tidewater goby
western snowy plover

N
W
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Cayucos Sanitary District

Map Updated: November 23, 2016, 03:45 PM

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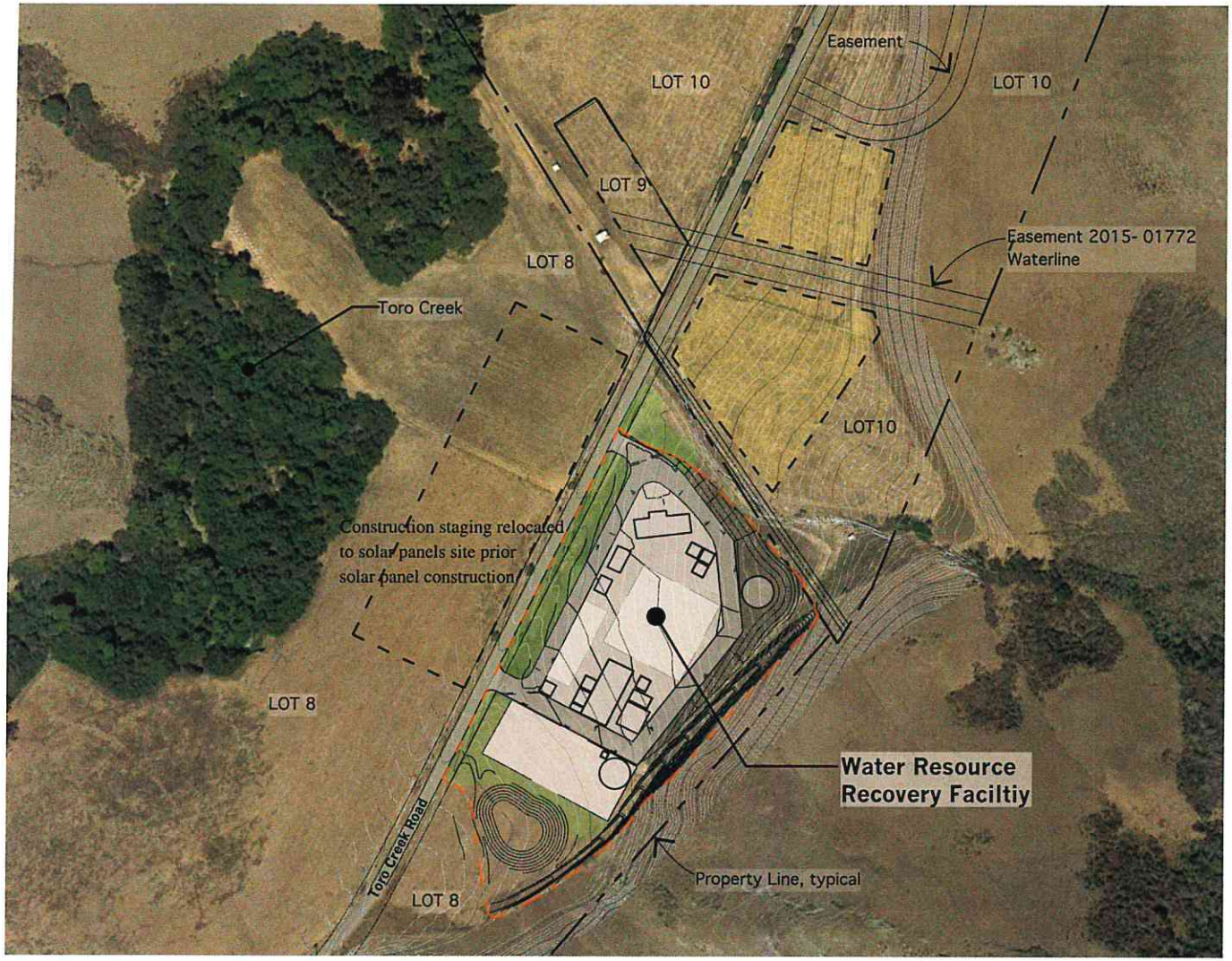
Figure 5. Project Impact Map



NOTES:
-Refer to Map I-5 for identification of various buildings and compontents

CAYUCOS SANITARY DISTRICT
805-995-3290

Cayucos Sustainable Water Project

Proposed Project

Legend:

- Limit of WRRF grading
- Solar Array (xxx acres)
- Temporary Construction Staging
- Landscape Screen

0 50' 100'
Scale

NORTH

MAP I-4

Appendix A – Botanical and Wildlife Inventory

Botanical Survey Results

Botanical surveys in 2015 and 2016 identified 81 species, subspecies, and varieties of vascular plant taxa within or immediately adjacent to the Action Area (Table A-1). These consist of 37 native species and 44 introduced species. No special status plants were identified within the Action Area.

TABLE A-1. PLANT LIST.

Scientific Name	Special Status	Origin	Common Name
Ferns – 1 species			
Equisetum sp.	None	Native	Horsetail
Trees - 6 species			
Eucalyptus globulus	None	Introduced	Blue-gum
Myoporum laetum	None	Introduced	Myoporum
Platanus racemosa	None	Native	Western sycamore
Populus fremontii	None	Native	Fremont cottonwood
Quercus agrifolia	None	Native	Coast live oak
Salix lasiolepis	None	Native	Arroyo willow
Shrubs – 6 species			
Baccharis pilularis	None	Native	Coyote brush
Frangula californica	None	Native	Coffeeberry
Ricinus communis	None	Introduced	Castor bean
Rubus ursinus	None	Native	California blackberry
Sambucus nigra ssp. *caerulea*	None	Native	Blue elderberry
Toxicodendron diversilobum	None	Native	Poison oak
Forbs – 58 species			
Achillea millefolium	None	Native	Yarrow
AesclepiasAsclepias fascicularis	None	Native	Narrow leaf milkweed
AngallisAnagallis arvensis	None	Introduced	Scarlet pimpernel
Artemisia douglasiana	None	Native	Mugwort
Atriplex rosea	None	Introduced	Tumbling saltweed
Calystegia macrostegia ssp. *cyclostegia*	None	Native	Morning glory
Carduus pycnocephalus	None	Introduced	Italian thistle
Chenopodium album	None	Introduced	Lamb's-quarters
Chlorogalum pomeridianum var. *pomeridianum*	None	Native	Amole lily
Cirsium vulgare	None	Introduced	Bull thistle
Claytonia perfoliata	None	Native	Miner's lettuce

Scientific Name	Special Status	Origin	Common Name
Clematis sp.	None	Native	Virgin's bower
Conium maculatum	None	Introduced	Poison hemlock
Delairea odorata	None	Introduced	German ivy
Erodium cicutarium	None	Introduced	Redstem filaree
Eschscholzia californica	None	Native	California poppy
Euphorbia peplus	None	Introduced	Petty spurge
Foeniculum vulgare	None	Introduced	Fennel
Galium sp.	None	Native	Bedstraw
Galium aparine	None	Native	Goose grass
Geranium dissectum	None	Introduced	Geranium
Hedypnois cretica	None	Introduced	Crete weed
Helminthotheca echioides	None	Introduced	Bristly ox-tongue
Kickxia elatine	None	Introduced	Fluellin
Lactuca serriola	None	Introduced	Prickly lettuce
Lamium amplexicaule	None	Introduced	Henbit
Layia platyglossa	None	Native	Tidy tips
Lomatium sp.	None	Native	Biscuit root
Lotus corniculatus	None	Introduced	Birdfoot trefoil
Lupinus succulentus	None	Native	Arroyo lupine
Malva parviflora	None	Introduced	Cheeseweed
Marah fabaceus	None	Native	California man-root
Matricaria discoidea	None	Introduced	Pineapple weed
Medicago polymorpha	None	Introduced	California burclover
Melilotus sp.	None	Introduced	Sweet clover
NasturiumNasturtium officinale	None	Native	Common watercress
Oxalis pes-caprae	None	Introduced	Bermuda buttercup
Plantago lanceolata	None	Introduced	English plantain
Platystemon californicus	None	Native	Cream cups
Polygonum aviculare	None	Introduced	Common knotweed
Pterostegia drymarioides	None	Native	Pterostegia
Ranunculus californicus	None	Native	California buttercup
Raphanus raphanistrum	None	Introduced	Jointed charlock
Rumex crispus	None	Introduced	Curly dock
Scrophularia californica	None	Native	California figwort
Silene gallica	None	Introduced	Catchfly
Silybum marianum	None	Introduced	Milk thistle

Scientific Name	Special Status	Origin	Common Name
Sisyrinchium bellum	None	Native	Blue-eyed grass
Solanum americanum	None	Native	Common nightshade
Solanum xanti	None	Native	Purple nightshade
Sonchus sp.	None	Introduced	Sow thisle
Stellaria media	None	Introduced	Chickweed
Torilis sp.	None	Introduced	Hedge parsley
Urtica dioica ssp. *holosericea*	None	Native	Stinging nettle
Urtica urens	None	Introduced	Dwarf nettle
Veronica anagallis-aquatica	None	Native	Water speedwell
Viola pedunculata	None	Native	Johnny jump-up
Xanthium spinosum	None	Native	Spiny cocklebur
Grasses – 10 species			
Avena fatua	None	Introduced	Wild oat
Bromus diandrus	None	Introduced	Ripgut brome
Bromus hordeaceus	None	Introduced	Soft chess brome
Bromus madritensis ssp. *rubens*	None	Introduced	Red top brome
Festuca perennis	None	Introduced	Italian ryegrass
Hordeum murinum	None	Introduced	Foxtail barley
Hordeum vulgare	None	Introduced	Barley
Lamarckia aurea	None	Introduced	Goldentop grass
Phalaris sp.	None	Introduced	Canarygrass
Poa secunda	None	Native	One-sided bluegrass

Wildlife Survey Results

During site visits conducted in 2015 and 2016, Althouse and Meade biologists observed a variety of wildlife in the Action Area for the currently proposed Project. These include 1 fish species, 1 amphibian species, 22 birds, and 2 mammals. A complete list of wildlife observed in the Action Area is provided in Table A-2. Small mammal trapping was not conducted as part of our biological surveys.

TABLE A-2. WILDLIFE LIST.

Common Name	Scientific Name	Special Status	General Habitat Preference
	Fish – 1 species		
Steelhead - South/Central ESU	*Oncorhynchus mykiss*	FT	Coastal streams with an ocean connection
	Amphibians - 1 species		
California (Western) Toad	*Anaxyrus [=Bufo] boreas halophilus*	None	Grassland, woodland
	Birds - 22 species		
American Crow	*Corvus brachyrhynchos*	None	Many habitats, esp. urban
Anna's Hummingbird	*Calypte anna*	None	Many habitats
Band-tailed Pigeon	*Patagionenas fasciata*	None	Woodlands, urban trees
Black Phoebe	*Sayornis nigricans*	None	
Brewer's Blackbird	*Euphagus cyanocephalus*	None	Open habitats
California Towhee	*Melozone crissalis*	None	Brushy habitats
Cassin's Kingbird	*Tyrannus vociferans*	None	Open and semi-open areas
Eurasian Collared Dove	*Streptopelia decaocto*	None	Urban areas
European Starling	*Sturnus vulgaris*	None	Agricultural, livestock areas
House Finch	*Carpodacus mexicanus*	None	Riparian, grasslands, chaparral, and woodlands
Lark Sparrow	*Chondestes grammacus*	SA (Nesting)	Woodland edges
Mourning Dove	*Zenaida macroura*	None	Open and semi-open habitats
Nuttall's Woodpecker	*Picoides nuttallii*	SA (Nesting)	Oak, riparian woodlands
Pacific-slope Flycatcher	*Empidonax difficilis*	None	Riparian, oak woodlands
Red-tailed Hawk	*Buteo jamaicensis*	None	Open, semi-open country
Rock Pigeon	*Columba livia*	None	Urban areas
Rock Wren	*Salpinctes obsoletus*	None	Grasslands with rock outcrops
Say's Phoebe	*Sayornis saya*	None	Open grasslands
Tree Swallow	*Tachycineta bicolor*	None	Oak, riparian woodlands, open areas near water
Turkey Vulture	*Cathartes aura*	None	Open country
Western Bluebird	*Sialia mexicana*	None	Woodland near open areas
Western Scrub-Jay	*Aphelocoma californica*	None	Oak, riparian woodlands

Common Name	Scientific Name	Special Status	General Habitat Preference
Mammals - 2 species			
Dusky-footed Woodrat	*Neotoma* sp.	None	Riparian woodland
Mule Deer	*Odocoileus hemionus*	None	Many habitats

Abbreviations:
FT: Federally threatened
SA: CDFW Special Animal

Appendix B – Other Federally-listed Species Reported from the Region

TABLE B-1. OTHER FEDERALLY-LISTED SPECIES IN THE REGION.

Scientific Name	Common Name	Fed/State	Nesting/ Breeding Period	Habitat Preference	Potential Habitat?	Effect of Proposed Activity
			Wildlife			
Branchinecta lynchi	Vernal Pool Fairy Shrimp	FT/None	Rainy Season	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	No. Appropriate habitat is not present on-site.	No Effect
Charadrius alexandrinus nivosus	Western Snowy Plover	FT/None	March 15 - August 15	Sandy beaches, salt pond levees, and shorelines of large alkali lakes. Needs friable soils for nesting.	No. Appropriate habitat is not present on-site.	No Effect
Dipodomys heermanni morroensis	Morro Bay Kangaroo Rat	FE/CE	n/a	Coastal sage scrub on the south side of Morro Bay. Needs sandy soil, but near active dunes, prefers early seral stages.	No. Appropriate dune habitat is not present on-site.	No Effect
Helminthoglypta walkeriana	Morro Shoulderband Snail	FE/None	n/a	Restricted to the coastal strand and sage scrub habitats in the immediate vicinity of Morro Bay.	No. Appropriate habitat is not present on-site.	No Effect
Rallus longirostris obsoletus	California Clapper Rail	FE/CE	March 15 - August 15	Saltwater and brackish marshes traversed by tidal sloughs.	No. Appropriate habitat is not present on-site.	No Effect
Vireo bellii pusillus	Least Bell's Vireo	FE/CE	March 15 - August 15	Riparian habitat, near water or dry streambed, <2000 ft. Nests in willows, mesquite, Baccharis.	No. Project site is outside the current known range of this species.	No Effect
Vulpes macrotis mutica	San Joaquin Kit Fox	FE/CT	December – July	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	No. Project site is outside the known range of this species.	No Effect
			Plants			
Arctostaphylos morroensis	Morro Manzanita	FT/None	December - March	Sand dunes; <200 m. s CCo (Morro Bay, SLO County)	No. Dune habitat is not found on-site.	No Effect

Scientific Name	Common Name	Fed/State	Nesting/ Breeding Period	Habitat Preference	Potential Habitat?	Effect of Proposed Activity
Arenaria paludicola	Marsh Sandwort	FE/CE	May - August	Boggy meadows, marshes; <300 m. s CCo (Nipomo Mesa, SLO County, Santa Ana River, SCo)	No. Appropriate habitat is not found on-site.	No Effect
Chloropyron maritimum ssp. *maritimum*	Salt Marsh Bird's-beak	FE/CE	May - October	Coastal salt marshes;<10 m. SCo, n Baja CA	No. Salt marsh habitat is not found on-site.	No Effect
Cirsium fontinale var. *obispoense*	San Luis Obispo Fountain Thistle	FE/CE	February - July	Serpentine seeps and streams; <300 m. Endemic to SLO County	No. Appropriate soils and habitat are not found on-site.	No Effect
Cirsium scariosum var. *loncholepis*	La Graciosa Thistle	FE/CT	April – November	Marshes, dune wetlands; <50m. s CCo (sw San Luis Obispo, nw Santa Barbara counties)	No. Appropriate habitat is not found on-site.	No Effect
Eriodictyon altissimum	Indian Knob Mountainbalm	FE/CE	March - June	Sandstone ridges, chaparral; 250± m. Endemic to SLO County	No. Appropriate soils and habitat are not found on-site.	No Effect
Suaeda californica	California Seablite	FE/None	July - October	Margins of coastal salt marshes; <5 m. CCo	No. Salt marsh habitat is not found on-site.	No Effect

Habitat characteristics are from the Jepson Manual and the CNDDB.

Habitat Preference Abbreviations:
CCo: Central Coast SCo: South Coast SLO: San Luis Obispo

Status/Rank Abbreviations:
FE: Federally Endangered FT: Federally Threatened CE: California Endangered CT: California Threatened

March 12, 2016

David Foote
Firma Consultants
186 Tank Farm Road, Suite 230
San Luis Obispo, CA 93401

Subject: Essential Fish Habitat (EFH) Assessment, Addendum to the Biological Assessment (BA) for the Cayucos Sanitary District's Cayucos Sustainable Water Project (CSWP)

Dear David:

Below is an Essential Fish Habitat (EFH) Assessment for Cayucos Sanitary District's (CSD) Cayucos Sustainable Water Project (CSWP) in compliance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA). EFH means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

For projects receiving federal funding or a federal permit, the MSA requires an evaluation of project impacts on EFH. For this project, potential project impacts on EFH within Estero Bay at the proposed discharge outfall for the project are discussed below.

Essential Fish Habitat Background

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires Federal agencies to consult with the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) on activities that may adversely affect EFH. The objective of this EFH assessment is to determine whether or not the proposed action(s) may adversely affect a designated EFH for relevant commercially, federally-managed fisheries species within the proposed action area. It also describes conservation measures proposed to avoid, minimize, or otherwise offset potential adverse effects to designated EFH resulting from the proposed action.

Description of the Project/Proposed Activity

The Proposed Action involves the construction of a new tertiary wastewater treatment facility to treat wastewater from the service area of the CSD.

The CSD was formed in 1942 to provide sewer service to the unincorporated community of Cayucos. In 1954, the CSD constructed a sewer system and treatment plant (the Morro Bay Cayucos Sanitary District Waste Water Treatment Plant [MBCSD WWTP]) under a joint powers agreement with the Morro Sanitary District (now City of Morro Bay). The plant ultimately was reconstructed in 1984 under a joint powers agreement. The CSD owns and holds capacity rights to 35 percent of the existing ocean outfall and sewage treatment plant and 40 percent of the land with the remainder being owned by the City of Morro Bay. The District collects wastewater from 2,657 service connections and transports it to the treatment plant in Morro Bay which has a peak dry-weather flow capacity of 2.36 million gallons. As of

2015, the District generates approximately 0.274 million gallons per day (MGD) of wastewater, or about 33.2 percent of its 0.826 MGD gallon entitlement.

All of the treated effluent from the existing MBCSD WWTP is discharged through the existing Morro Bay outfall to Estero Bay. The existing MBCSD WWTP currently provides secondary treatment of wastewater discharged to the ocean.

Discharge from the CSWP to the Pacific Ocean (Estero Bay) will be via the existing 4,400 foot outfall diffuser system that will be shared with the discharge from the City of Morro Bay in the existing MBCSD WWTP outfall. The outfall terminates in the Pacific Ocean (35^0 23'11" Latitude, 120^0 52'29" Longitude) in approximately 50' of water 2,700 feet from shore (please see Attachment 1 for map of the existing outfall location). No modifications are proposed to the ocean outfall from shore to the ocean.

The CSWP's discharge will be permitted under a new individual National Pollutant Discharge Elimination System (NPDES) permit obtained from the Central Coast Regional Water Quality Control Board (RWQCB). The Individual NPDES permit will require compliance with effluent limitations, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including protection of rare and endangered species and fisheries.

A major objective of the CSWP is to improve water quality of the effluent discharged at the ocean outfall. Attachment 1 includes a discussion of the anticipated water quality benefits from the CSWP.

Potential Adverse Effects of Proposed Project

EFH exists for the following species within Estero Bay at the outfall for the project:

- All Coastal Pelagic Species including:
  - Finfish;
  - Market squid; and
  - Krill (*Thysanoessa spinifera*, *Euphausia pacifica*, and other krill species); and
- Groundfish.

No physical impacts on EFH for these species would occur under the project because the existing ocean outfall infrastructure would be utilized for the CSWP and no modifications are proposed for the infrastructure from shore to the ocean. In addition, the CSWP is expected to have a net beneficial effect on all aspects of water quality at the ocean outfall. The NPDES permit that will be received for the tertiary level of treatment will also have strict limits on effluent and receiving water quality that are protective of these species and their habitat. In addition, the NPDES permit will require implementation of a rigorous monitoring program and enforcement program that will ensure compliance with permit limits. Therefore, no adverse effects on EFH are anticipated.

EFH Conservation Measures

Because no adverse effects on EFH are anticipated under the CSWP and the discharge will be regulated

by the RWQCB under a new NPDES permit, no additional EFH Conservation Measures are proposed.

Conclusions

No adverse effects on EFH are anticipated under the CSWP and no EFH Conservation Measures are proposed.

Please contact me at (805) 746-1680 or mgibbs@migcom.com at any time with any questions.

Sincerely,

Michelle Gibbs

Michelle Gibbs
Senior Biologist/Planner

cc: Rick Koons, Cayucos Sanitary District

Attachments:
1 CSWP Anticipated Discharge Water Quality

Attachment 1
CSWP Anticipated Discharge Water Quality

WSC
WATER SYSTEMS CONSULTING, INC.

Date: 3/14/2017

To: Rick Koon
District Manager
Cayucos Sanitary District
200 Ash Avenue
Cayucos, CA 93430

Prepared by: Dylan Wade, P.E. CCM.

Reviewed by: Kirsten Plonka, P.E.

Project: Cayucos Sustainable Water Project

SUBJECT: **CSWP ANTICIPATED DISCHARGE WATER QUAILITY**

The purpose of this memo is to provide National Marine Fisheries Services (NMFS) with data regarding the anticipated discharge from the Cayucos Sustainable Water Project (CSWP). Due to the much higher level of treatment proposed under the CSWP, discharges from the CSWP's WRRF (tertiary treatment) are anticipated to be of superior quality to those of the existing Morro Bay Cayucos Sanitary District's Waste Water Treatment Plant (MBCSD WWTP) (primary/secondary treatment) thereby resulting in a net benefit to marine water quality.

Anticipated Discharge Characteristics

Discharge from the CSWP to the Pacific Ocean will be via a 4,400 foot outfall diffuser system that will be shared with the discharge from the City of Morro Bay in the existing MBCSD WWTP outfall. The outfall terminates in the Pacific Ocean (35^0 23'11" Latitude, 120^0 52'29" Longitude) in approximately 50' of water 2,700 feet from shore as shown in the figure below.

The CSWP's discharge will be permitted under an individual National Pollutant Discharge Elimination System (NPDES) permit from the Central Coast Regional Water Quality Control Board. The individual NPDES permit will require compliance with effluent limitations, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including protection of rare and endangered species, fisheries, and other marine aquatic life. Preparation of the NPDES permit application is underway; the anticipated limitations on the plant effluent are:

- Floating particulates and grease and oil shall not be visible.
- Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
- Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
- Discharges may not cause exceedances of water quality objectives for ocean waters of the State established in Table 1 of the California Ocean Plan.
- Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

Specific limitations on the effluent of the CSWP will be:

- Total Suspended Solids (TSS) – 30 mg/L average monthly limit
- pH 6-9 at all times

While process models have been prepared for the Wastewater Resource Recovery Facility (WRRF), not all discharge parameters have, or can be adequately determined through process modeling. In anticipation of applying for the individual NPDES permit, the Cayucos Sanitary District has taken grab samples from the untreated wastewater at Lift Station No. 5 which will become the influent of the new proposed WRRF. Only a few metals and ammonia were detected in this sample at concentrations that exceed the most stringent Water Quality Objectives.

The following sections provide additional detailed answers regarding specific questions from NMFS.

1.1 Water Clarity

According to the Tetra Tech's March 1984 Morro Bay 301(h) application, ambient TSS concentrations measured in Estero Bay range from 20-34 mg/L. The average monthly TSS from the CSWP will be limited to 30 mg/L which is within the ambient range of TSS. The CSWP's effluent will be diluted via the outfall diffusers such that no meaningful increase in ambient TSS is anticipated outside of the zone of initial dilution.

1.2 Water Temperature

Based on water quality samples taken of effluent from the existing MBCSD WWTP in 2012, average daily summer water temperatures ranged between 20.61°C and 23.00°C. Average daily winter water temperatures ranged between 18.20°C and 23.00°C. The discharge temperatures from the CSWP WRRF are not anticipated to be materially different. Spot testing of the future CSWP influent from Lift Station 5 in early 2017 found a temperature of 19°C which is consistent with observed temperatures from the MBCSD WWTP.

1.3 Nutrient Removal

The removal of nutrients at the WRRF will be primarily accomplished through a Modified Ludzack-Ettinger process coupled with a membrane bioreactor. The primary nutrients of concern are:

- Nitrogen – the biological treatment process is being designed to reduce nitrogen to 10 mg/L to facilitate future reuse of the effluent.

- Phosphorous - membrane bioreactors have the potential to significantly reduce phosphorous levels through biological processes. Chemical addition can increase the removal efficiencies of phosphorous as necessary to meet discharge limitations.

1.4 Conclusions

The discharge from the CSWP will be treated to a higher standard than the existing discharge and will be subject to stricter discharge water quality standards. Therefore, the CSWP would have a net benefit on water quality in Estero Bay and a net benefit to marine aquatic resources.


Legend
Existing Ocean Outfall
Proposed Toro Creek WRRF Site
MBCSD WWTP
Ocean Discharge Point
Existing Lift Station 5
Proposed WRRF Pump Station
Proposed Outfall Lift Station
Existing Gravity Main
Existing Ocean Outfall Pipeline
Existing Forcemain
Proposed Influent Forcemain
Proposed Effluent Forcemain
FM-1
FM-2
WTP
Morro Bay
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community
CAYUCOS SANITARY DISTRICT
805.995.3290
Cayucos Sanitary District
Effluent Pipeline Analysis
Proposed Effluent System
0 0.25 0.5 Miles
N
WSC
Water Systems Consulting, Inc.

Appendix D Land Use Site Assessment (LESA)

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request 12-08-2016	
Name of Project Cayucos Sanitary Dist Torro Creek Proj		Federal Agency Involved Rural Development	
Proposed Land Use Water Treatment Facility		County and State San Luis Obispo, CA	
PART II *(To be completed by NRCS)*		Date Request Received By NRCS 12/8/2016	Person Completing Form: Ken Oster
Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated 81636	Average Farm Size 502
Major Crop(s) wine grapes, strawberries, broccoli	Farmable Land In Govt. Jurisdiction Acres: 255378% 12.0	Amount of Farmland As Defined in FPPA Acres: 25793% 12.1	
Name of Land Evaluation System Used CA Revised Storie Index	Name of State or Local Site Assessment System None	Date Land Evaluation Returned by NRCS 12/12/2016	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	9.62			
B. Total Acres To Be Converted Indirectly	0			
C. Total Acres In Site	9.62			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	9.62			
B. Total Acres Statewide Important or Local Important Farmland	0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.004			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	37.76			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	41			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15			
2. Perimeter In Non-urban Use	(10)	10			
3. Percent Of Site Being Farmed	(20)	20			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	5			
6. Distance To Urban Support Services	(15)	5			
7. Size Of Present Farm Unit Compared To Average	(10)	0			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	5			
10. On-Farm Investments	(20)	5			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	65			
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	41			
Total Site Assessment *(From Part VI above or local site assessment)*	160	65			
TOTAL POINTS *(Total of above 2 lines)*	260	106			

Site Selected: A	Date Of Selection 12/13/2016	Was A Local Site Assessment Used? YES ☑ NO ☐

Reason For Selection:

No other reasonable alternatives are available.

Name of Federal agency representative completing this form: USDA Rural Development | Date: 12/13/2016

(See Instructions on reverse side)

Form AD-1006 (03-02)

Addendum to form AD-1006

Project: Cayucos Sanitary Dist.

Land: Torro Creek (Apn's 073-092034, 073-092-050)

Part IV: No's 1-12(following criteria of CFR 658.5 in vol 49 No 130 dated 7/5/1984, attached)

1. Area in non-urban use – based on aerial observation and measurement it is estimated that the area is composed of 90+ % non-urban land, therefore no deduction is made.

2. Perimeter in non-urban use – all of the land bordering the site is non-urban therefore no deduction is made.

3. Percentage of site being farmed- all of the land has been farmed during the last 5 years, therefore no deduction is made.

4. Protection by state or local government- the land is not protected by the County of San Luis Obispo or the State therefore no points are given.

5. Closeness to urban build up - based on aerial measurement Site is 0.7 Mi from Cayucos and 0.9 Mi from Morro Bay, therefore 5 points are given.

6. The site is approximately 4,000 ft from Hwy 1, which is where the closest water/sewer service is. Choices are 1mi (10pts) and 0.5 mi (0 pts), therefore 5 points are given.

7. Size for present farm compared to County Avg – the County avg for San Luis Obispo is 704 Ac. The parcel in question is 221 Ac or 31% of avg. 13 (5%-units) X 1% = 13 points deducted. (The max deduction allowed is 10 points, therefore use 0.)

8. Percentage of land becoming un-farmable: 9.62Ac / 221 Ac = 4.3% "If less than 5%, give 0 points".

9. Availability of farm support services- San Luis Obispo County is heavily dependent on the "ag" industry and has many options for services, therefore all points are given.

10. Substantial and well-maintained investment ? The parcel only has a small "stock" well on the property. Moderate investment is best choice (1- 19 points possible). Because of smallness, only 5 points given.

11. Would conversion affect other farms or support services ? The County is very rural and the demand for ag commodities is low. There are an abundance of un-used properties in the area. No adverse effect on other properties. No points given.

12. Would propose use adversely affect or be incompatible for ag in surrounding area ? The proposed project would produce clean water, which would be used for farming or used to recharge groundwater supply. The proposed project enhances ag, therefore project is "fully compatible". Therefore no points given.

conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible with existing agricultural use of surrounding farmland—10 points

Proposed project is tolerable to existing agricultural use of surrounding farmland—9 to 1 point(s)

Proposed project is fully compatible with existing agricultural use of surrounding farmland—0 points

(c) *Corridor-type Site Assessment Criteria.* The following criteria are to be used for projects that have a linear or corridor-type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information described in § 658.4(a). All criteria for corridor-type sites will be scored as shown in § 658.5(b) for other sites, except as noted below:

(1) Criteria 5 and 6 will not be considered.

(2) Criterion 8 will be scored on a scale of 0 to 25 points, and criterion 11 will be scored on a scale of 0 to 25 points.

§ 658.6 Technical assistance.

(a) Section 1543 of the Act, 7 U.S.C. 4204 states, "The Secretary is encouraged to provide technical assistance to any state or unit of local government, or any nonprofit organization, as determined by the Secretary, that desires to develop programs or policies to limit the conversion of productive farmland to nonagricultural uses." In § 2.62, of 7 CFR Part 2, Subtitle A, SCS is delegated leadership responsibility within USDA for the activities treated in this part.

(b) In providing assistance to states, local units of government, and nonprofit organizations, USDA will make available maps and other soils information from the national cooperative soil survey through SCS field offices.

(c) Additional assistance, within available resources, may be obtained from local offices of other USDA agencies. The Agricultural Stabilization and Conservation Service and the Forest Service can provide aerial photographs, crop history data, and related information. A reasonable fee may be charged. In many states, the Cooperative Extension Service can provide help in understanding and identifying farmland protection issues and problems, resolving conflicts, developing alternatives, deciding on appropriate actions, and implementing those decisions.

(d) Officials of state agencies, local units of government, nonprofit organizations, or regional, area, state-level, or field offices of federal agencies may obtain assistance by contacting the office of the SCS state conservationist. A list of Soil Conservation Service state office locations appears in Appendix A, Section 661.6 of this Title. If further assistance is needed, requests should be made to the Assistant Secretary for Natural Resources and Environment, Office of the Secretary, Department of Agriculture, Washington, D.C. 20250.

§ 658.7 USDA assistance with federal agencies' reviews of policies and procedures.

(a) Section 1542(a) of the Act, 7 U.S.C 4203, states, "Each department, agency, independent commission or other unit o the Federal Government, with the assistance of the Department of Agriculture, shall review current provisions of law, administrative rules and regulations, and policies and procedures applicable to it to determine whether any provision thereof will prevent such unit of the Federal Government from taking appropriate action to comply fully with the provisions of this subtitle."

(c) USDA will provide certain assistance to other federal agencies for the purposes specified in section 1542 of the Act, 7 U.S.C. 4203. If a federal agency identifies or suggests changes in laws, administrative rules and regulations, policies, or procedures that may affect the agency's compliance with the Act, USDA can advise the agency of the probable effects of the changes on the protection of farmland. To request this assistance, officials of federal agencies should correspond with the Chief, Soil Conservation Service, P.O. Box 2890, Washington, D.C. 20013.

Dated: June 28, 1984.

John B. Crowell, Jr.,

Assistant Secretary for Natural Resources and Environment

[FR Doc. 84-17694 Filed 7-3-84; 8:45 am]

BILLING CODE 3410-16-M

land for national defense purposes, here are no other exemptions of projects by category in the Act.

(f) Numerous states and units of local government are developing and adopting Land Evaluation and Site Assessment (LESA) systems to evaluate the productivity of agricultural land and its suitability for conversion to nonagricultural use. Therefore, state and units of local government may have already performed an evaluation using criteria similar to those contained in this rule applicable to federal agencies. USDA recommends that where sites are to be evaluated within a jurisdiction having a state or local LESA system that has been approved by the governing body of such jurisdiction and has been placed on the SCS state conservationist's list as one which meets the purpose of the FPPA in balance with other public policy objectives, federal agencies use that system to make the evaluation.

§ 658.5 Criteria.

This section states the criteria required by section 1541(a) of the Act, 7 U.S.C. 4202(a). The criteria were developed by the Secretary of Agriculture in cooperation with other federal agencies. They are in two parts, (1) the land evaluation criterion, relative value, for which SCS will provide the ting or score, and (2) the site sessment criteria, for which each ederal agency must develop its own tings or scores. The criteria are as ollows:

(a) *Land Evaluation Criterion—Relative Value.* The land evaluation criterion is based on information from several sources including national cooperative soil surveys or other acceptable soil surveys, SCS field office technical guides, soil potential ratings or soil productivity ratings, land capability classifications, and important farmland determinations. Based on this information, groups of soils within a local government's jurisdiction will be evaluated and assigned a score between 0 to 100, representing the relative value, for agricultural production, of the farmland to be converted by the project compared to other farmland in the same local government jurisdiction. This score will be the Relative Value Rating on Form AD 1006.

(b) *Site Assessment Criteria.* Federal agencies are to use the following criteria to assess the suitability of each proposed site or design alternative for protection as farmland along with the ore from the land evaluation criterion cribed in § 658.5(a). Each criterion l be given a score on a scale of 0 to maximum points shown. Conditions suggesting top, intermediate and bottom scores are indicated for each criterion. The agency would make scoring decisions in the context of each proposed site or alternative action by examining the site, the surrounding area, and the programs and policies of the state or local unit of government in which the site is located. Where one given location has more than one design alternative, each design should be considered as an alternative site. The site assessment criteria are:

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent—15 points
90 to 20 percent—14 to 1 point(s)
Less than 20 percent—0 points

(2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent—10 points
90 to 20 percent—9 to 1 point(s)
Less than 20 percent—0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent—20 points
90 to 20 percent—19 to 1 points(s)
Less than 20 percent—0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected—20 points
Site is not protected—0 points

(5) How close is the site to an urban built-up area?

The site is 2 miles or more from an urban built-up area—15 points
The site is more than 1 mile but less than 2 miles from an urban built-up area—10 points
The site is less than 1 mile from, but is not adjacent to an urban built-up area—5 points
The site is adjacent to an urban built-up area—0 points

(6) How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?

None of the services exist nearer than 3 miles from the site—15 points
Some of the services exist more than 1 but less than 3 miles from the site—10 points
All of the services exist within ½ mile of the site—0 points

(7) Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the SCS field offices in each state. Data are from the latest available Census of Agriculture. Acreage of Farm Units in Operation with $1,000 or more in sales.)

As large or larger—10 points
Below average—deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average—9 to 0 points

(8) If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project—10 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project—9 to 1 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project—0 points

(9) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available—5 points
Some required services are available—4 to 1 point(s)
No required services are available—0 points

(10) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment—20 points
Moderate amount of on-farm investment—19 to 1 point(s)
No on-farm investment—0 points

(11) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted—10 points
Some reduction in demand for support services if the site is converted—9 to 1 point(s)
No significant reduction in demand for support services if the site is converted—0 points

(12) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual

March 12, 2016

David Foote
Firma Consultants
186 Tank Farm Road, Suite 230
San Luis Obispo, CA 93401

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  - Market squid; and
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by the RWQCB under a new NPDES permit, no additional EFH Conservation Measures are proposed.

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Please contact me at (805) 746-1680 or mgibbs@migcom.com at any time with any questions.

Sincerely,

Michelle Gibbs

Michelle Gibbs
Senior Biologist/Planner

cc: Rick Koons, Cayucos Sanitary District

Attachments:
1 CSWP Anticipated Discharge Water Quality

Attachment 1
CSWP Anticipated Discharge Water Quality

WSC
WATER SYSTEMS CONSULTING, INC.

Date: 3/14/2017

To: Rick Koon
District Manager
Cayucos Sanitary District
200 Ash Avenue
Cayucos, CA 93430

Prepared by: Dylan Wade, P.E. CCM.

Reviewed by: Kirsten Plonka, P.E.

Project: Cayucos Sustainable Water Project

SUBJECT: **CSWP ANTICIPATED DISCHARGE WATER QUAILITY**

The purpose of this memo is to provide National Marine Fisheries Services (NMFS) with data regarding the anticipated discharge from the Cayucos Sustainable Water Project (CSWP). Due to the much higher level of treatment proposed under the CSWP, discharges from the CSWP's WRRF (tertiary treatment) are anticipated to be of superior quality to those of the existing Morro Bay Cayucos Sanitary District's Waste Water Treatment Plant (MBCSD WWTP) (primary/secondary treatment) thereby resulting in a net benefit to marine water quality.

Anticipated Discharge Characteristics

Discharge from the CSWP to the Pacific Ocean will be via a 4,400 foot outfall diffuser system that will be shared with the discharge from the City of Morro Bay in the existing MBCSD WWTP outfall. The outfall terminates in the Pacific Ocean (35^0 23'11" Latitude, 120^0 52'29" Longitude) in approximately 50' of water 2,700 feet from shore as shown in the figure below.

The CSWP's discharge will be permitted under an individual National Pollutant Discharge Elimination System (NPDES) permit from the Central Coast Regional Water Quality Control Board. The individual NPDES permit will require compliance with effluent limitations, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including protection of rare and endangered species, fisheries, and other marine aquatic life. Preparation of the NPDES permit application is underway; the anticipated limitations on the plant effluent are:

- Floating particulates and grease and oil shall not be visible.
- Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
- The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
- Nutrient levels shall not cause objectionable aquatic growths or degrade indigenous biota.
- Discharges may not cause exceedances of water quality objectives for ocean waters of the State established in Table 1 of the California Ocean Plan.
- Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

Specific limitations on the effluent of the CSWP will be:

- Total Suspended Solids (TSS) – 30 mg/L average monthly limit
- pH 6-9 at all times

While process models have been prepared for the Wastewater Resource Recovery Facility (WRRF), not all discharge parameters have, or can be adequately determined through process modeling. In anticipation of applying for the individual NPDES permit, the Cayucos Sanitary District has taken grab samples from the untreated wastewater at Lift Station No. 5 which will become the influent of the new proposed WRRF. Only a few metals and ammonia were detected in this sample at concentrations that exceed the most stringent Water Quality Objectives.

The following sections provide additional detailed answers regarding specific questions from NMFS.

1.1 Water Clarity

According to the Tetra Tech's March 1984 Morro Bay 301(h) application, ambient TSS concentrations measured in Estero Bay range from 20-34 mg/L. The average monthly TSS from the CSWP will be limited to 30 mg/L which is within the ambient range of TSS. The CSWP's effluent will be diluted via the outfall diffusers such that no meaningful increase in ambient TSS is anticipated outside of the zone of initial dilution.

1.2 Water Temperature

Based on water quality samples taken of effluent from the existing MBCSD WWTP in 2012, average daily summer water temperatures ranged between 20.61°C and 23.00°C. Average daily winter water temperatures ranged between 18.20°C and 23.00°C. The discharge temperatures from the CSWP WRRF are not anticipated to be materially different. Spot testing of the future CSWP influent from Lift Station 5 in early 2017 found a temperature of 19°C which is consistent with observed temperatures from the MBCSD WWTP.

1.3 Nutrient Removal

The removal of nutrients at the WRRF will be primarily accomplished through a Modified Ludzack-Ettinger process coupled with a membrane bioreactor. The primary nutrients of concern are:

- Nitrogen – the biological treatment process is being designed to reduce nitrogen to 10 mg/L to facilitate future reuse of the effluent.

- Phosphorous - membrane bioreactors have the potential to significantly reduce phosphorous levels through biological processes. Chemical addition can increase the removal efficiencies of phosphorous as necessary to meet discharge limitations.

1.4 Conclusions

The discharge from the CSWP will be treated to a higher standard than the existing discharge and will be subject to stricter discharge water quality standards. Therefore, the CSWP would have a net benefit on water quality in Estero Bay and a net benefit to marine aquatic resources.


Legend
Existing Ocean Outfall
Proposed Toro Creek WRRF Site
MBCSD WWTP
Ocean Discharge Point
Existing Lift Station 5
Proposed WRRF Pump Station
Proposed Outfall Lift Station
Existing Gravity Main
Existing Ocean Outfall Pipeline
Existing Forcemain
Proposed Influent Forcemain
Proposed Effluent Forcemain
FM-1
FM-2
WTP
L
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community; Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community
CAYUCOS SANITARY DISTRICT
805.995.3290
Cayucos Sanitary District
Effluent Pipeline Analysis
Proposed Effluent System
0 0.25 0.5 Miles
N
WSC
Water Systems Consulting, Inc.

Appendix E Cultural Resources Reports

ARCHAEOLOGICAL INVESTIGATION OF TWO LOCATIONS AND ATTENDANT PIPELINES FOR THE PROPOSED WASTEWATER TREATMENT FACILITY, CAYUCOS COMMUNITY SERVICES DISTRICT, CAYUCOS, SAN LUIS OBISPO COUNTY, CALIFORNIA

Submitted to:

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December, 2016

USGS 7.5' Quadrangle, Cayucos, CA
USGS 7.5' Quadrangle, Morro Bay North, CA

CRMS
CULTURAL RESOURCE MANAGEMENT SERVICES

CRMS Project No.: 50-897

INTRODUCTION

Firma Consultants, Inc. is assisting the Cayucos Community Service District with the planning and permitting process to select a site for a new wastewater treatment facility and attendant pipeline. At the request of Firma Consultants, Inc., Cultural Resource Management Services (CRMS) has conducted cultural resource investigations at several locations in the Cayucos area of San Luis Obispo County, California. This investigation is a continuation of efforts begun in 2015 (Farrell and Simons 2015). At that time, there were five potential candidate locations for placement of the new wastewater facility. Based on the results of that study, and other considerations, the current plan for the system (Figure 1) was completed. This required the investigation of an additional parcel adjacent to on previously surveyed (Figure 2) and the pipeline routes (Figure 3).

The intent of this cultural resources investigation is to comply with Section 106 of the National Historic Preservation Act (NHPA) and with the requirements of the California Environmental Quality Act (CEQA) and the County of San Luis Obispo Planning and Building Department. A literature and records search and an intensive archaeological survey of each of the proposed areas was conducted to identify and evaluate any significant prehistoric or historic archaeological resources that might be impacted by waste water facility development.

Per the requirements of the Conservation and Open Space Element of the San Luis Obispo County Land Use Ordinance, CEQA, and AB-52 (see Regulatory Setting), letters were sent to Native American tribes, organizations and individuals. The list of recipients was provided by the Native American Heritage Commission (NAHC), and is comprised of those groups and individuals thought to have a cultural interest in this area, notifying them of the proposed project, inviting them to consult, and requesting information or concerns regarding the proposed project.

ENVIRONMENTAL CONTEXT

Location

The wastewater treatment facility Proposed Project Site (PPS) (±20 acres) is located on the south side of Toro Creek Road. The Alternate Project Site (APS) is on

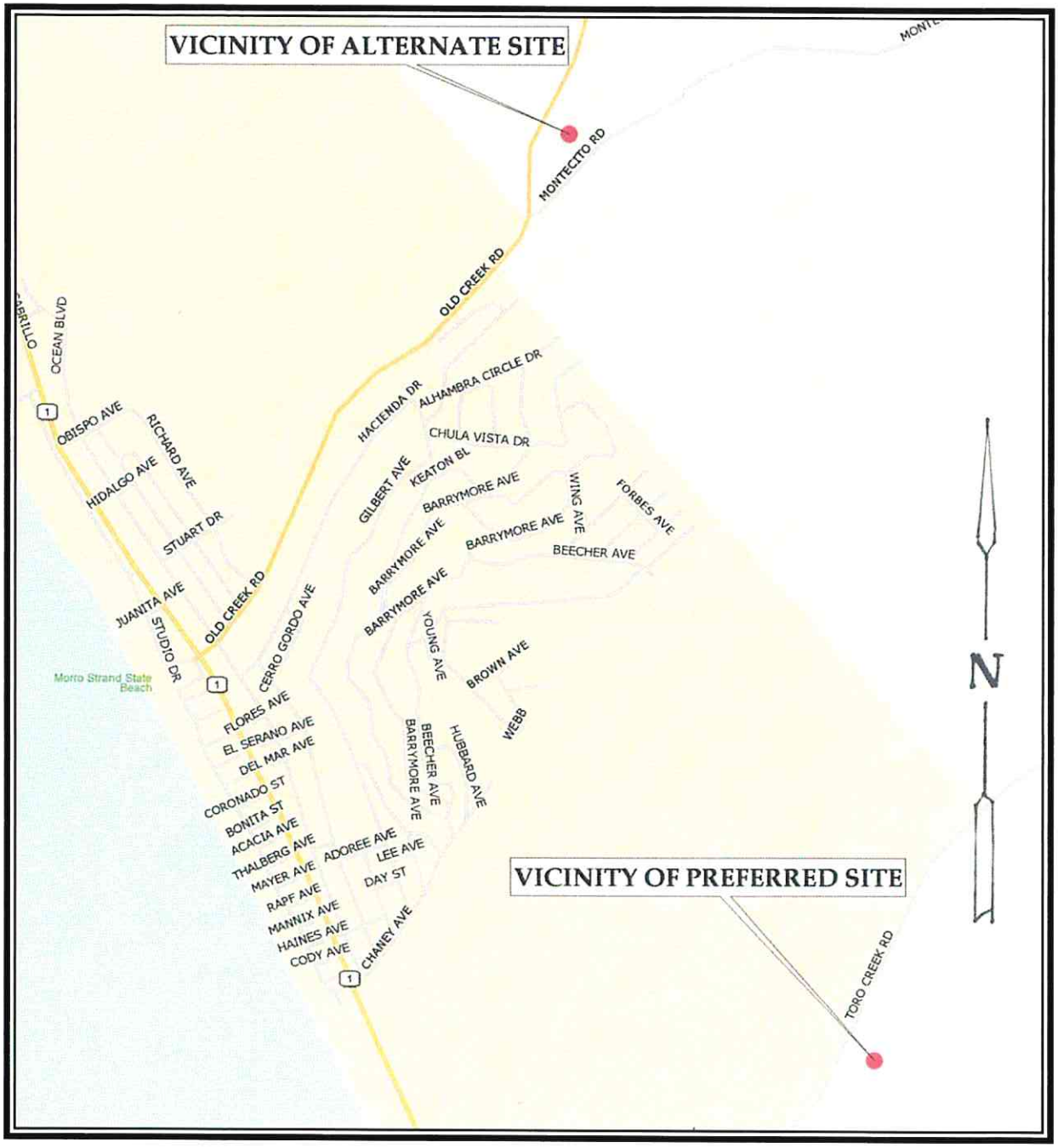

Figure 1: Map Showing Vicinity of Preferred and Alternate Sites (No Scale)

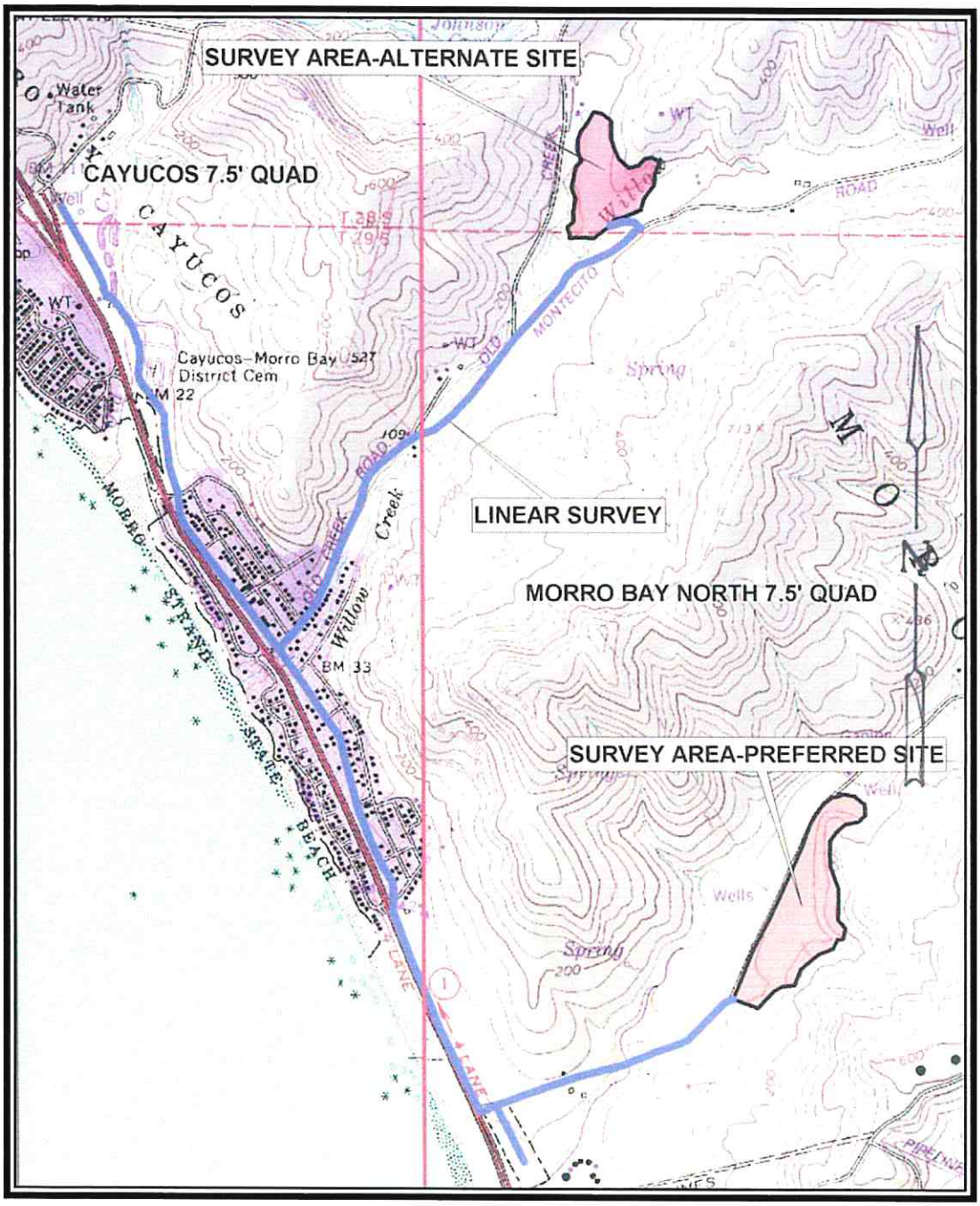

Figure 2: Portion of USGS 7.5' Quadrangle Cayucos and Morro Bay South Showing Preferred and Alternate Sites As Well As Northern Reach of Pipeline

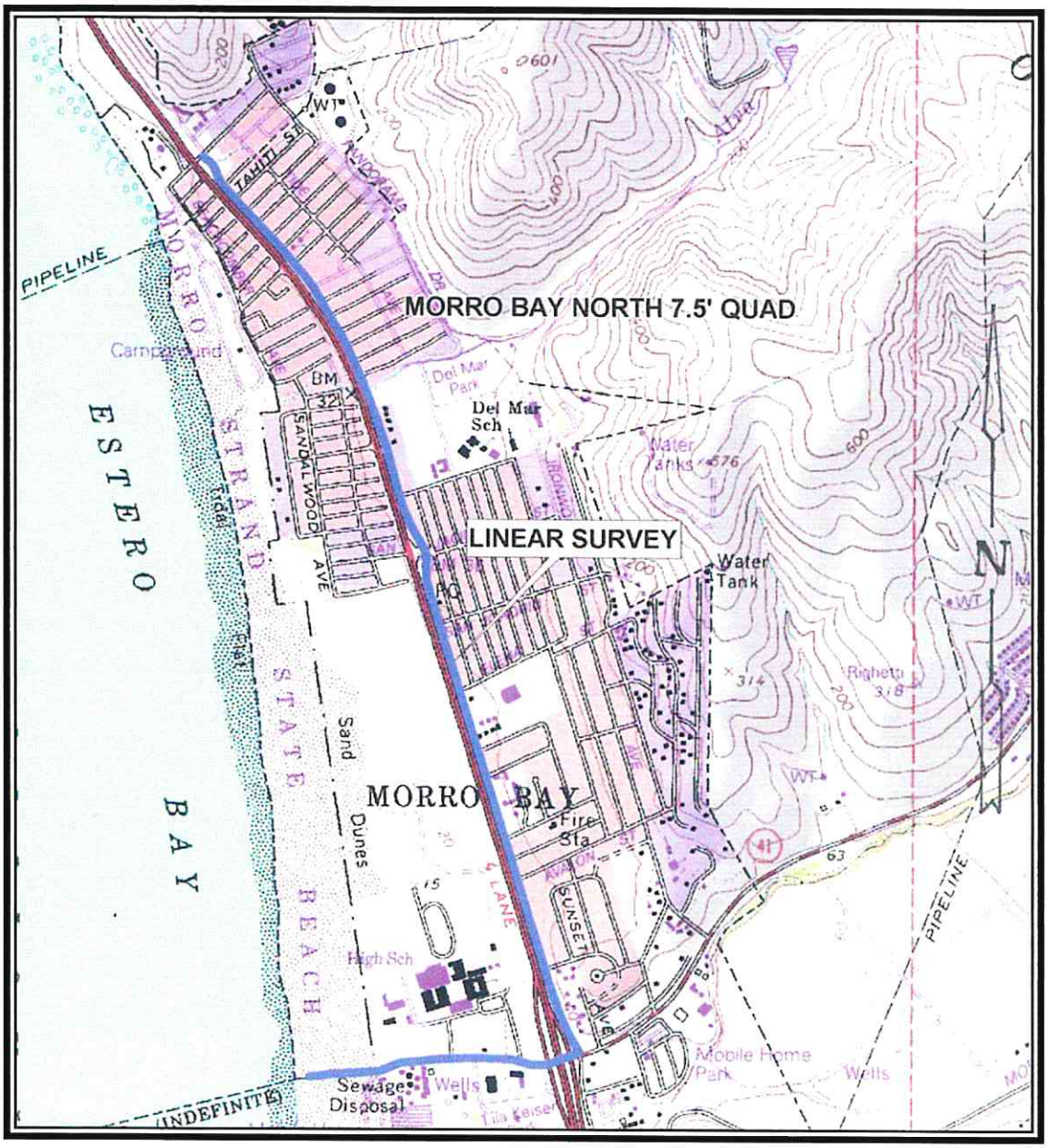

Figure 3: Portion of USGS 7.5' Quadrangle Morro Bay North Showing Southern Reach of Pipeline To Ocean Outfall

Old Creek Road/Montecito Road (± 20 acres) . Also included in this project area is an approximately 8 mile pipeline system connecting the facilities.

Environmental Setting

The topography of this region is characterized by narrow marine terraces bounded by the Pacific Ocean on the west and the Santa Lucia Mountains to the east. The candidate sites lie in the rolling foothills east of the marine terraces. This mountain range rises to between 760 and 1033 meters (2500 to 3400 feet); there are a number of perennial drainages to the west, including the valleys containing the candidate sites. The proximity to the ocean provides a Mediterranean climate with mild, wet winters and warm, dry summers.

Yearly rainfall averages 40 centimeters at the coast and more than double that at the crest of the Santa Lucia Mountain Range. Precipitation is largely a seasonal phenomenon with over 90% of it occurring between October and April. On the coast the dry summer period is ameliorated by frequent fog in the summer months. The inland areas are considerably drier during this period.

Geologically the area is composed of marine terraces now exposed due to sea level subsidence. In places these terraces were cut by erosion, and with the rise and fall of sea level due to glaciation they would at times form the basis of estuaries. From the crest of the Santa Lucia Mountains to the beginning of the marine terraces, the Franciscan Formation, a mixture of chert, sandstone, argillites, shales and schists, is the predominant geologic formation underlying the topography.

This coastline sustains a diversity of marine flora and fauna. In the beach zone salt-tolerant species of plants such as saltbush (*Atriplex* spp.), sand verbena (*Abronia* spp.), eelgrass (*Zostera marina*) and nightshade (*Lycium* spp.) are the dominant members. The rocky shoreline found at Cayucos supports mussel (*Mytilus californianus*) and, less commonly, red and black abalone (*Haliotis rufescens* and *H. cracherodii*). In the immediate vicinity, the sandy beaches at Morro Bay support Pismo clam (*Tivela stultorum*). Other species to be found among the inter-tidal pools along the rocky shoreline are black turban snail (*Tegula funebralis*), limpets (Acmaeidae family), sea urchin (*Strongylocentrotus purpuratus*), ocher starfish (*Pisaster ochraceous*), hermit crab (*Pagurus hirsutiusculus*), sand crab (*Emerita analoga*) and purple olivella (*Olivella biplicata*).

A number of marine fish species such as mackerel (Scombridae family), anchovy (Engraulididae family), sardine (*Sardinops* spp.) and surf smelt (*Hypomesus pretiosus*) are seasonally present on this part of the coast. There is the possibility of year-round procurement of such fish as California sheepshead (*Pimelometopon pulchrum*), cabezon (*Scopaenichthys marmoratus*), bass (Serranidae family), surf perch (Embiotocidae family) and rockfish (*Sebastes* spp.) which thrive in the kelp beds on rocky bottoms.

Marine mammals are another important component of the maritime resources present in this area. The California gray whale (*Eschrichtius robustus*), the sea otter (*Enhydra lutris*), as well as numerous species of dolphin are seasonal visitors. The California sea lion (*Zalophus californianus*) and the Stellar sea lion (*Eumetopias jubata*) are present throughout the year. Prior to the arrival of Europeans to the region northern fur seals (*Calohinus ursinus*) and southern fur seals (*Arctocephalus townsendi*) were also present.

Turning inland one finds an equally abundant variety of habitats and resources. Marsh, coastal strand, coastal scrub, riparian woodland and annual grassland comprise the major elements of the plant communities to be found in the region. Coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*), California black berry (*Rubus ursinus*) and bush lupine (*Lupinus arboreus*) are abundant in the coastal scrub zone. Wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*) and mustard (*Brassica geniculata*) are common species in grassland communities. The riparian woodlands environment is home to oaks (*Quercus* spp.), pines (*Pinus* spp.), willows (*Salix* spp.), sycamore (*Platanus racemosa*), alders (*Alnus rhombiflora*) and berries (*Rubus* spp.).

In addition to a variety of reptiles and amphibians, there are black-tailed deer (*Odocoileus hemionus columbianus*), black-tailed jack rabbit (*Lepus californicus*), a number squirrels (*Spermophilus* spp.), gophers (*Thomomys* spp.) and mice (*Microtus* spp. and *Peromyscus* spp.). Tule elk (*Cervus elaphus nannoides*), black bear (*Ursus americanus*) and grizzly bear (*Ursus horribilis*) were formerly present in the region. The fresh water creeks are, or were, home to steelhead (*Salmo gairderii*).

The flora and fauna to be found in the range of environments described above would have been an attractive resource for the original American Indian inhabitants procuring subsistence on the central coast.

CULTURAL CONTEXT

Archaeological Record

Archaeological investigations completed along the central California coast have supported the creation of a general culture historical sequence (Erlandson 1994; King 1990; Jones *et al.* 1994; Mikkelsen *et al.* 1998). Temporal periods include the Paleoindian Period (ca. 11000 BP to 8500 BP), the Millingstone Period (ca. 8500 BP to 5500 BP), the Early Period (ca. 5500 BP to 3000 BP), the Middle Period (ca. 3000 BP to 1000 BP), the Middle/Late Transition Period (ca. 1000 BP to 700 BP), and the Late Period (ca. 700 BP to Spanish contact).

This sequence is based primarily on archaeological investigations around the Santa Barbara Channel, and its application to San Luis Obispo County needs to be considered critically. Pioneering work by Carter (1941) and by Greenwood (1972) concluded that a significant continuity of material culture existed in both northern and southern Chumash territories, sufficient to consider this broad region generally as a unified culture area (both north and south of Point Conception). However, more recent information has shown observable differences between northern and southern Chumash material records (Fitzgerald and Jones 1998; King 1991; Mikkelsen *et al.* 1998).

Fitzgerald and Jones (1998) emphasize that the circumstances of the natural and cultural environment of San Luis Obispo County should be considered in their own right to develop a specific culture historical sequence rather than attempt to place the local sequence within a larger and more generalized chronology that lacks specific reference to the area in question. Stated briefly, the northern Chumash material record is more similar to Salinan than to southern Chumash material. Whereas southern Chumash sites are noted for large villages with high population densities and intensified utilization of marine resources and terrestrial animal hunting, these same components are absent in both northern Chumash and Salinan sites. As a result of these important differences, the characterization of a time period in the project area (in northern Chumash territory) may not follow exactly the expectations of the temporal sequence that is modeled after information from southern Chumash sites. With these cautions in mind, the culture historical sequence is described with reference to the general regional pattern as well as expectations specific to the project area.

Paleoindian Period (ca. 11000 BP to 8500 BP)

Although the Paleoindian Period is documented clearly in other parts of California, it is not well substantiated in the central coast of California. It is important to note, though, that people were indeed present in California at this time. Until recently, it has been thought that human activity was minimal, or to have left minimal material traces, in the central coastal areas of California. Evidence from recent and ongoing investigations may soon change this picture, however.

Thus far, only one site in San Luis Obispo County has provided confirmed evidence of human occupation at this early date. This site is CA-SLO-1797 (the Cross Creek Site), located about 9.6 km inland from the present shoreline of Pismo Beach. A series of 16 radiocarbon dates confirm past human occupation of this site as early as ca. 10300 BP to 7600 BP (Fitzgerald 1998). These radiocarbon dates were based on samples of marine shells excavated from the site, corrected for isotopic fractionalization and marine/atmospheric C14 discrepancies. The site is described as a stratified deposit of occupation debris.

Millingstone Period (ca. 8500 BP to 5500 BP)

The Millingstone Period is named after the groundstone tools, used for processing nuts and seeds, that first appeared in the archaeological record of the area during this time period. Along the Santa Barbara Channel, sites from the Millingstone Period contain high densities of handstones, milling slabs, thick rectangular (L-series) beads of *Olivella* shell, and shell refuse middens (Glassow 1996; Warren 1967). Remains of fish and terrestrial animals are minimal. At this time, the local diet was characterized by protein-rich shellfish and high-caloric nuts and seeds.

Early Period (ca. 5500 BP to 3000 BP)

The Early Period is characterized by the same material remains found in the Millingstone Period (e.g., handstones, milling slabs, and L-series *Olivella* beads), along with the appearance of some new items such as mortars and pestles. Also, an increase is noted in the frequency of large side-notched projectile points. In the faunal assemblage, fish bone and terrestrial animal bone increase in abundance. The appearance of a new material assemblage of tools has been interpreted as either the arrival of a new immigrant population (see Lathrap and Troike 1984) or else local developmental changes in technology and economy (see Erlandson 1997; Glassow 1997). Factors such as functional variability between sites, seasonal variation, and diverse adaptive strategies in

different environmental settings probably are responsible for the development of the material culture assemblage typical of the Early Period. In brief, the economy of the Early Period seems to have been more specialized than it was previously.

Middle Period (ca. 3000 BP to 1000 BP)

The Middle Period shows an increase in the diversity of the material culture assemblage. Projectile points include contracting stems and possibly concave base variants. Beads of *Olivella* shell include a variety of types (Bennyhoff and Grantham 1994), such as spire-lopped (A1), small oblique spire-lopped (A2a), medium end-ground (B2b), small barrel (B3a), tiny saucer (G1), saucer (G2 and G6), symmetrical irregular saucer (G6a), and asymmetrical irregular saucer (G6b). Other shell ornaments made of abalone (*Haliotis* spp.) shell include disk ornaments, perforated disks, and rings with incised edges. Ornaments made of giant keyhole limpet (*Megathura crenulata*) shell include plain and flat-ended rings. An increase is noted in the remains of nearshore schooling fish such as anchovies (*Engraulis* spp.), herring (Clupeidae family), and smelt (Osmeridae family). Circular fishhooks are present in the tool assemblage (Glassow 1996; Jones 1995). In the southern Chumash areas, evidence is found for the use of plank canoes and harpoons, indicating exploitation of deep sea ecological zones, but such evidence is lacking around the project area. In the project area, economic emphasis most likely continued to focus on the same resources as previously targeted in the Early Period.

Middle/Late Transition Period (ca. 1000 BP to 700 BP)

The Middle/Late Transition Period is characterized by further specialization in the material culture assemblage. Among the lithic projectile points, specific artifact types include contracting stem points and double side-notched points (Glassow 1996). Beads of *Olivella* shell include types B2, B3, G1, G2, G6, K1, and possibly D1 (Bennyhoff and Grantham 1994). Curved fish hooks are also noted (Jones 1995). Intensification of the marine economy is well documented along the Santa Barbara Channel along with changes in projectile point technology for the hunting of terrestrial animals (Glassow 1996), but these same changes are not evident in the northern Chumash areas such as in the project area in Cayucos.

Late Period (ca. 700 BP to Spanish contact)

The Late Period is the period that relates most appropriately to the living systems

observed during the early historic period, including a suite of *Olivella* shell beads, groundstone artifacts, chert and obsidian projectile points and other flaked tools, and fishhooks. Arnold (1987, 1992) argues that in the southern Chumash areas, *Olivella* sp. beads came to be used as money currency, associated with the development of a highly structured social and political system. During this time period, southern Chumash occupation areas included several densely-populated villages. In contrast, the northern Chumash occupation areas (such as in the Morro Bay/Cayucos area) was characterized by widely scattered, sparse populations.

Ethnohistorical Record

Documentation of traditional Chumash social practices during the early historic period can be used to describe general patterns in traditional lifeways. This information should not be taken to describe past human practices precisely in all cases. Most importantly, this information does not relate to the more distant past, but it does help to provide a comparative base for interpretation.

At the time of Spanish colonization of the state (following 1769), the region around Cayucos was sparsely populated. These communities included people living in what has been characterized as a hunting and gathering economy, but which we understand also involved tending and management of resources (Anderson 2005). Feuding was common, as village groups defended their families, and subsistence resources. Based mostly on broad surveys of language distributions, Kroeber (1925) places the northern boundary of the Obispeño Chumash and the southern boundary of the Salinan territory just north and east of the town of Morro Bay. Greenwood (1978) followed this designation formally, but she indicated the possibility that the territory might have been further north near the Monterey county line. Drawing on data from Mission records, Gibson (1983a, 1992), King (1984, 1991), and Rivers and Farris (1994) have also favored the more northerly region.

In regards to the project area, the significance of the difference between Chumash and Salinan territories is to place the project area within a larger context. The more southerly boundary places the project area at the margins of Chumash and Salinan territories. The more northerly boundary would indicate that the project area was well within the Chumash territory, at least at the time of Spanish contact. In any case, the

territories were not static over time. Archaeologists note that much of the material culture found in both Salinan and northern Chumash territories is quite similar.

The existing ethnographic record indicates that the northern Chumash (such as those in the project area) were noticeably different in social structure and customs from the southern Chumash (such as those in the Santa Barbara area). The southern Chumash are noted for large community organizations with dense populations and elaborate social and political structures. In contrast, the northern Chumash and Salinan communities are characterized as consisting of small and widely scattered populations that did not exhibit the same intensity of structuring of social and political organization as seen in the more southerly groups.

Early historic observations reported that the local inhabitants of Morro Bay and the surrounding area maintained a generalized hunting and gathering economy, shared in common with most areas of California at the time of Spanish contact (for reviews, see Brown 1967; Geiger and Meighan 1976; King 1991; Wagner 1924). Fish and shellfish were common food sources. The technology of the plank canoe was known among the southern Chumash, but it was not documented anywhere north of Point Conception and thus was in all likelihood absent in the project area. In this northern setting, the exploitation of marine resources was concentrated in the estuary and in nearshore areas. Among the plant foods, acorns were the most important, providing a staple and storable food source. Nuts and seeds were processed with a set of groundstone tools commonly found in the material culture assemblages of Californian groups. Hunting of terrestrial animals was accomplished with the bow and arrow, and certain projectile points made of chert or obsidian are testimony to these practices.

In 1595 Spanish explorers on the central coast found the Chumash still living near the shoreline. With the permanent Spanish occupation of California in the late eighteenth century, important changes quickly followed (Mikkelsen *et al.* 1998:18). In 1772, Mission San Luis Obispo was founded. By the close of 1803, the mission's agricultural commune system absorbed the local inhabitants of Morro Bay and their neighbors on the coast from Cayucos to Pismo Beach and inland beyond Santa Margarita. Patterns of human activity and land use changed dramatically after the arrival of the Spanish.

Historic Period

The Spanish establishment of the mission system led to a marked decline in the indigenous population over the next twenty years and had an immediate effect on the nature of the subsistence strategies employed by the native peoples. After 1830, when the mission system was in decline, large ranchos were created throughout California. In the central coast region extensive cattle ranching was established. The town of Cayucos takes its name from what the Spanish explorers in the Portola expedition called the small canoes that the natives in the area used.

This project property was originally part of the 8,845-acre Rancho Moro y Cayucos, granted on December 28, 1837. The Moro portion was granted to Martin Olivera, and the Cayucos portion to Vicente Feliz. The entire holding was ceded to James McKinley on April 27, 1842 by the Mexican government. In 1878 legal questions concerning the ownership of the property were finally cleared up in *Pujol vs the McKinley Heirs,* and Don Domingo Pujol was granted clear title to the land by the California Supreme Court.

The town itself was started in 1867 by Captain James Cass (Nicholson 1988:74). Cass claimed 360 acres of government land with the intent of setting up a farm. He quickly tired of farming, though, as the ocean ran through Cass' veins. He began a business using small vessels to ferry goods between coastal steamers and the shore.

The primary commodity that Cayucos had to offer was dairy products. In the 1860s extensive commercial dairying came to San Luis Obispo county. The land was relatively cheap, as many of the previous owners were in difficult financial straits brought on by the drought of 1862 - 1864, which had devastated the traditional cattle raising ranchos. Dairying was highly successful in the county; San Luis Obispo county ranked second only to Marin county for the entire state of California. The difficulties encountered in getting rail access to the central coast meant that commodities from the central coast had to go by sea. The Cayucos region was home to both successful dairy farms and a relatively sheltered anchorage.

Captain Cass in partnership with Captain John Ingalls, began construction of a pier in 1872. Originally 380 feet, it was lengthened to 982 feet in 1876, allowing ships to dock right alongside. After construction of the wharf, Cass' shipping business expanded

greatly, transforming Cayucos to a bustling commercial seaport, shipping beef and dairy products to markets in Los Angeles and San Francisco. The enterprises of Captain James Cass ensured that Cayucos became a center for the surrounding region as well.

Chauncy H. Phillips the organizer and manager of the Bank of San Luis Obispo, purchased the Rancho Cayucos from Don Domingo Pujol in 1875. Phillips and Pujol surveyed the land and divided it into lots and ranchos. Sales of the lots were successful and by the time the population in Cayucos reached 250 the town boasted a school, church, drugstore, doctor's office, real estate office, meat market, hotel, blacksmith, post office and a Wells Fargo office (Dickerson 1989: 177). The shipping business stayed brisk until the arrival of the Southern Pacific Railroad in the 1880s and 1890s.

A through rail connection from Los Angeles to San Francisco was finally completed in 1901. With the arrival of the railroads the town (which had never been large) became much less important to the local economy. The dairy industry declined shrank during the 20th century and finally disappeared. In 1929 the Standard Oil Marine Terminal was constructed south of town at Toro Creek, to store and load crude oil from Kern County and the Kettleman Hills onto tankers. The facility was later taken over by Chevron and operated until 1996.

By the mid twentieth century, Cayucos was a small and quiet beach community. Business was concentrated along the main street, which was also Highway 1. Small beach cottages were the predominant dwelling for the inhabitants of the town. A mixture of sea-side residence, agricultural activities, and tourism was established which characterizes the area to this day. Because of its relatively remote location, Cayucos remains a small community to this day, although the town has been expanding slowly along the Highway 1 corridor towards Morro Bay to the south.

REGULATORY SETTING

FEDERAL

National Historic Preservation Act

Cultural resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (16 United States Code [USC] 470f), and its implementing

regulation, Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800). The Archaeological and Historic Preservation Act of 1974; and the Archaeological Resources Protection Act of 1979 further address archaeological resources. Section 106 of the NHPA requires Federal agencies to consider the effects of an "undertaking" Prior to implementing an "undertaking" (e.g., issuing a Federal permit), requires Federal agencies to consider the effects of the undertaking on historic properties. The Advisory Council on Historic Preservation and the State Historic Preservation Officer must be afforded a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the NRHP. As indicated in Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance to a tribe are eligible for inclusion in the NRHP. Under the NHPA, a resource is considered significant if it meets the NRHP listing criteria at 36 CFR 60.4. Federal regulations only come into play in the private sector if a project requires a federal permit or if it uses federal funding.

National Register of Historic Places

The NRHP was established by the NHPA of 1966 as "an authoritative guide to be used by Federal, State, and local governments; private groups; and citizens to identify the nation's historic resources and indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2). The NRHP recognizes arange of historic and prehistoric archaeological properties as well as the built environment that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria (U.S. Department of the Interior 1995):

a. The resource is associated with events that have made a significant contribution to the broad patterns of our history;
b. The resource is associated with the lives of persons significant in our past;
c. The resource embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master or possesses high artistic values or represents a significant and distinguishable entity whose components may lack individual distinction; or

d. The resource has yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for NRHP listing (U.S. Department of the Interior 1995). In addition to meeting the criteria of significance, a property must have integrity, defined as"the ability of a property to convey its significance" (U.S. Department of the Interior 1995). The NRHP recognizes seven qualities that, in various combinations, define integrity. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.

Executive Order 11593.

Executive Order 11593, Protection of the Cultural Environment, (May 13, 1971), 36 Code of Federal Regulations, Section 8921 as incorporated into Title 7, United States Code orders the protection and enhancement of the cultural environment through providing leadership, establishing State offices of historic preservation, and developing criteria for assessing resource values.

STATE

California Environmental Quality Act (CEQA)

CEQA (PRC Section 21000 et seq.) requires lead agencies to determine if a project would have a significant effect on the environment, including significant effects on historical or archaeological resources. Under CEQA (Section 21084.1), a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. The State CEQA Guidelines (14 CCR 15064.5) recognize that historical resources include:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR;
2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k), or identified as significant in a historical resource survey

meeting the requirements of PRC Section 5024.1(g); and
3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the State CEQA Guidelines apply. If a project may cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired) in the significance of a historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (14 California Code of Regulations [CCR] 15064.5[b][1], 15064.5[b][4]).

If an archaeological site does not meet the historical resource criteria contained in the State CEQA Guidelines, the site may be treated as a unique archaeological resource in accordance with the provisions of Section 21083. As defined in Section 21083.2 of CEQA, a unique archaeological resource is an archaeological artifact, object, or site for which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets the following criteria:

a. Contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
b. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
c. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If an archaeological site meets the criteria for a unique archaeological resource, then it is to be treated in accordance with the provisions of Section 21083.2, which state that if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1[a]). If preservation in place is not feasible, mitigation measures shall be required.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) (1998) is "an authoritative guide in California to be used by State and local agencies, private groups, and citizens to identify the State's historical resources and indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change." Properties listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks (Nos. 770 and higher), are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program that are identified as significant in historic resources surveys or designated by local landmarks programs may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

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

Under PRC Section 4852©), a cultural resource must retain integrity to be considered eligible for the CRHP. It must retain sufficient character to be recognizable as a cultural resource and convey reasons for determining its significance. Integrity is evaluated with regard to the retention of factors such as location, design, setting, materials, workmanship, feeling, and association. Typically, a prehistoric archaeological site in California is recommended eligible for listing in the CRHP according to its potential to yield important information regarding prehistory or history(Criterion 4). Such information may come from chronological markers, such as projectile point styles; bead styles; obsidian artifacts, which can be subjected to dating methods; or undisturbed deposits that retain their stratigraphic integrity and therefore have the ability to answer research questions.

Native American Heritage Commission

Duties of the Native American Heritage Commission (NAHC), (PRC Section 5097.91) include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. Section 5097.98 of the PRC specifies the protocol to be followed when the NAHC receives notification of the discovery of Native American human remains from a county coroner.

Assembly Bill 52 (AB 52)

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expands the California Environmental Quality Act (CEQA) by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." According to the legislative intent for AB 52, "tribes may have knowledge about land and cultural resources that should be included in the environmental analysis for projects that may have a significant impact on those resources." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

California Public Records Act

Sections 6254 ®) and 6254.10 of the California Public Records Act were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254®) authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure

requests for "records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another State agency, or a local agency, including records that the agency obtains through a consultation process between a Native American tribe and a State or local agency."

Health and Safety Code, Sections 7050.5 and 7052

Health and Safety Code Section 7050.5 declares that in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

COUNTY

The County of San Luis Obispo Coastal Zone Land Use Ordinance (CZLUO) includes ordinance requirements for the protection of known cultural resources and for the implementation of mitigation measures to minimize potential impacts to known and unknown resources. In addition to General Plan and ordinance requirements, Coastal Plan Policies include policies for the protection of cultural resources consistent with the requirements of the California Coastal Act (1976).

PREVIOUS ARCHAEOLOGICAL RESEARCH

A search of maps and records was undertaken at the Central Coastal Information Center, UCSB, which provides archaeological site data for San Luis Obispo County under agreement with the California Office of Historic Preservation. The search parameters included all known archaeological sites and previous archaeological studies within a one-half mile radius of each of the candidate site areas and pipeline route. A total of 168 previous cultural resource studies have been conducted within the one-half mile radius: Riddell 1960; Clemmer 1962; Greenwood 1973, 1974, 1976; Spanne 1977; Dills n.d., 1977, 1988, 1989a-f, 1990-a, 1990b, 1990c, 1990d, 1990-f, 1991, 1992 a-d, 1993; Gibson 1973, 1980a, 1980b, 1980c, 1982, 1984, 1989, 1990a-c, 1991 a-b, 1994, 1995, 2000 ;

Bente 1980; Breschini and Haversat 1981; Haversat and Breschini 1981, 1984; Hoover 1982, 1983a-b, 1984a-b, 1985, 1988, 1991; Singer 1987, Dills, 1980; Haversat and Breschini 1984; Gibson 1990; Fugro-McClelland 1993; Runnings and Haversat 1993; Maki 1998a, 1998b; Conejo 1999.

Thirty-two archaeological sites have been recorded within ½ mile of the candidate parcels and pipelines:

SLO-16: A "large and deep "habitation shell midden site with associated cemetery, this site was first recorded in 1948, then again in 1952 and 1999. It was reported that dozens of burials had been looted previous to the first recording. The site was also damaged by the channelization of Morro Creek in the 1940s.

SLO-29: This habitation site was recorded in 1948 and was described as a "shell midden with stone tools".

SLO-43: This "large" shell midden was excavated in 1900 by P.M. Jones for the University of California Museum of Anthropology. By 1948 a nursery had been built upon it and it was mostly destroyed.

SLO-129: This is a shell midden containing abundant shell, fire-cracked rock, chipped stone tools, ground stone tools, and burned bone. It was recorded in 1952, by which time there was a road across the site, with a residence and garden on one side and Saxby's Motel (now the Sea Horse) on the other. A 1999 site record update states that five new homes have been built upon the former location of the motels. There is no evidence that any archaeological investigations were undertaken prior to this construction.

SLO-148: Recorded in 1959, this is a small habitation site with evidence of shell fragments.

SLO-150: A "series of small habitation areas marked by fragmentary shells", this site was recorded in 1959 (McKusick) but had apparently been excavated by UCSB in 1958, when human remains were removed.

SLO-152: This is a habitation site of unknown size, denoted by marine shell fragments when it was recorded (McKusick 1959).

SLO-153: An unknown number of bedrock mortars was recorded here in 1959 and subsequently inundated by Whale Rock Reservoir.

SLO-154: Recorded in 1960 (Riddell), this "large habitation site" has been impacted by cultivation and the construction of several buildings, but most of it may still be intact within the portion now under cultivation.

SLO-164: This temporary camp site was recorded in 1960 as a layer of Pismo clam shells and flaked stones buried below the surface. Archaeological testing was conducted in 1999 and "based on test excavations site [SLO-164] appears to have been obliterated by the roads, pipelines, homes, and creek surrounding it." (Mikkelsen et. al. 2001:22).

SLO-165: First recorded in 1960, this "large site consists of a shell midden covering a stabilized dune adjacent to Morro Creek; it contains significant amounts of flaked and ground stone, battered cobbles, shell and vertebrate faunal remains, along with beads, pendants, shell fishhooks, charmstones, ochre, and asphaltum. Features include shell and rock clusters and intact burials."(Mikkelsen and Hildebrandt 1996). Four occupation periods at the sites have been identified: Millingstone Period, 8000-7200 BP; Early Period, 5500-4500 BP (the major occupation); Middle Period, 3200-200 BP; and Late Period, 1000-550 BP. Multiple archaeological investigations have been conducted on various portions of the site: Greenwood 1974, Singer 1986b, 1991b, 1995, 1997a,b,c; 2003, 2007; Singer and Atwood 1987; Clark and Grantham 1990; Bertrando 1997; Parker 1999, 2000, 2001, 2003, 2004a, 2004b, 2007; Carson and Farrell 2000; Stevens 2002; Brewster 2009; Hannahs 2012.

SLO-166: This large village site, recorded in 1960, is a shell midden with stone tools.

SLO-181: This site was first recorded in 1964. It has been subsumed under SL0-879.

SLO-239: "A very, very large and deep cultural deposit" which was excavated in 1962. This test excavation revealed at least two cultural components, one of which dated to at least 5,OOO B.P. It uncovered a house floor with post holes and several burials. An inspection by Parker in 1999 discovered "midden to a depth of at least 2 meters and a large portion of the site which had little or no 'midden' soil discoloration, but lots of cultural material".

SLO-499: This is a large shell midden with associated bedrock mortars, recorded in 1960.

SLO-877: When this "probable habitation site" with black midden soil was recorded in 1979 by Charles Dills, it had already been subject to intensive development. He recommended further investigation in advance of sewer construction. The site was revisited in 1986, three auger holes revealed cultural deposits of 3 to 42 cm. In 1999 it could not be relocated.

SLO-879/H: This complex habitation site has multiple loci comprised of marine shell, chert flaked stone tools and manufacture debris, fire-affected rocks, shell beads, groundstone, and bedrock milling features. Human remains have been found at several locations. C.E. Dills (1979) originally recorded the site in 1979. In 1980 the site was evaluated by R. Gibson as part of a study for the Cayucos Sanitary District (Gibson 1980b,c). He noted that the site was known to contain burials and was likely a "large and important site." Subsequent investigations have since expanded and refined the boundaries of the site and extended them to include sites CA-SLO-181, CA-SLO-1187, and CA-SLO-1378 (Fugro West 1994; Price et al. (2004) ; Dietler and Laurie 2010; Berg et al. 2014; Gibson 2005; Lloyd et al. 2005). Excavations in areas of the site outside of the current proposed project found intact midden deposits up to one meter in depth (Lloyd et al. 2005). This site also has a historic component, consisting of structures that were part of the former Chevron Estero Marine Terminal and a ranching and farming complex (Price et al. 2004).

In 2016 53 shovel test pits (STP) were excavated along portions of the site within the proposed pipeline route, on both sides of Toro Creek Road Four

test excavation units (TEU) were then placed in areas of highest artifact density and areas where "the best soil profiles might be exposed" (Applied Earth Works 2016: 2). The results of the testing indicated that "areas along the road are more likely disturbed" (ibid). Placement of the pipeline within the top 18 inches below surface was recommended.

SLO-880: This site is a rock outcropping with at least 16 bedrock mortars.

SLO-1156: The remnants of a highly disturbed shell midden, this site was recorded in 1986.

SLO-1157: This is a very sparse shell scatter, probably the remains of a now-eroded shell midden. It was recorded in 1986.

SLO-1158: Recorded in 1986, this midden with shell fragments has minimal amounts of flaked stone (chert) debitage.

SLO-1187: Recorded in 1987, this site has since been subsumed as a part of SLO-879.

SLO-1376: This site consists of marine shell (*Mytilus* sp., *Haliotis* sp, *Protothaca* sp.) and Monterey and Franciscan chert flakes. The site area had previously been cut-through by the Whale Rock pipeline when the site was recorded in 1991.

SLO-1377: This site, recorded in 1991 is a scatter of marine shell fragments and chert flakes along the north side of Alva Paul Creek.

SLO-1378: Recorded in 1991, this site was later determined to be a part of SLO-879.

SLO-1478: A habitation site consisting of shellfish remains (*Tivela stultorum, Saxidomus nuttalli, Macoma nasuta, Protothaca staminea, Haliotis* sp., *Ostrea* sp., and *Acmea* sp.) and Franciscan chert flakes, this site was recorded in 1992.

SLO-1497: This location has been determined not to be an archaeological site.

SLO-1889: The Perry Dairy complex, a historic farm site recorded in 1998. The site consists of "two historical structures, a rock feature, barbed-wire fence-lines, a row of Monterey pine trees, and a moderately dense scatter of marine shell, glass fragments, and metal, situated along the slope above and south of Toro Creek Road." (Maki and Romani 1998).

SLO-2124: This habitation site is a buried deposit with abundant marine shell refuse, bone and sparse lithic tool debris that was discovered during monitoring (Parker 2001c).

SLO-2142: Marine shell and charcoal up to 80 cm deep are the constituents of this temporary camp. One human burial was found during monitoring (Parker 2000a).

SLO-2143: A prehistoric habitation deposit located in dune sands, this site was found during archaeological monitoring in 2000 (Parker 2000). The deposit was found to contain bone, marine shell and charcoal to a depth of 30 to 40 cm.

SLO-2222: This site is actually a part of CA-SLO-165.

SLO-2424: This is a shellfish collection and processing camp recorded in 2005. At least 10 species of marine shell were noted.

SLO-2589: Recorded in 2009 (Conway), this site is described as a shell midden with Pismo clam, little neck clam, and olivella shell fragments, as well as fire-affected rock.

A search of the inventories for the State Historic Property Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Historical Landmarks, and California Points of Historic Interest was also performed. One Historic Property (P40-41172), a small early 20th century residence has been recorded on 16th Street in Cayucos.

RESEARCH METHODS

Per the requirements of AB 52, CRMS contacted the California Native American Heritage Commission (NAHC) by letter on April 11, 2016 requesting a review of the Sacred Lands File (SLF). The NAHC responded on April 20, 2016, indicating that the search of the SLF did not indicate the presence of Native American cultural resources in the project area or anywhere in the vicinity. The NAHC provided a list of Native American contacts that may have additional information about the project area. CRMS mailed a letter requesting information concerning cultural resources in the project area to each of these contacts on April 28, 2016 (Exhibit B).

The field crew for the surface survey of the Alternate Project Site on Toro Road and the pipeline routes consisted of CRMS staff Nancy Farrell and Ron Rose. Survey transects were approximately 2-3 meters apart at the PPS. Overall visibility of the ground surface was good, averaging about 85%. All exposed areas of soil were inspected for the presence of artifacts, features, or other indications of significant cultural deposits. The spoils of burrowing rodents and other areas of disturbance were also thoroughly examined for evidence of subsurface archaeological deposits.

For surface survey of the pipeline alignments, each side of the roadside was examined along the entire route. Previously recorded archaeological sites in or adjacent to the proposed alignments were visited in order to assess the current condition.

RESULT OF INVENTORY

Preferred Project Site

No previously unknown sites or historic properties were found during the inventory survey. Additionally, subsequent excavation of 22 backhoe trenches within the treatment plant parcel revealed that ""no subsurface cultural deposits are present" (Applied Earthworks 2016: 3).

Alternate Project Site

There are no existing records of cultural resources within the project area and the field survey (2015) did not identify any prehistoric cultural resources. No impacts to prehistoric cultural resources would result from any component of the proposed project.

Pipeline Route

No previously unknown sites or historic properties were found during the inventory survey of the proposed pipeline. The following sites locations were investigated:

Site SLO 154

This site is adjacent to the north end of the proposed pipeline, it appears that the deposit does not extend to the pipeline corridor itself.

Site SLO-164

This site appears to have been destroyed by previous development. No cultural evidence could be seen during the current inventory survey.

SLO-879

The pipeline route passes through the recorded boundaries of this site. SLO-879 appears to be eligible for listing on the NRHP.

SLO-165

The pipeline alignment skirts the western recorded edge of this significant site. However, the new pipe is to be placed within the footprint of the existing sewer line.

CRITERIA FOR ADVERSE EFFECT

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association (800.5(a)(1)). The agency official, in consultation with the SHPO/THPO, may propose a finding of no adverse effect when the undertaking's effects do not meet the criteria of paragraph (a)(1) or the undertaking is modified or conditions are imposed.

According to the San Luis Obispo Environmental Checklist and the State CEQA Guidelines, impacts related to the Proposed Project would be considered significant and would require mitigation if they would:

1) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the CEQA Guidelines;
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines;
3) Disturb any human remains, including those interred outside of formal cemeteries.

CONCLUSIONS and RECOMMENDATIONS

Preferred Project Site (PPS)

The archaeological survey, background research, and subsurface testing demonstrated that there are no significant cultural resources present on this PPS.

Alternate Project Site (APS)

The archaeological survey and background research demonstrated that there are no significant cultural resources are present on this APS.

Pipeline Routes (PR)

The pipelines from and to the PPS will pass through the recorded boundaries of archaeological site CA-SLO-879/H. If the pipelines along Toro Creek Road are placed on the surface, or buried with no ground disturbing activity deeper than 18 inches there will be no adverse effect to cultural resources.

The PR will also pass with the recorded boundaries of archaeological site CA-SLO-165 in the vicinity of Main Street, SR41 and SR1. If the existing pipeline route is established with no question, and the new pipeline is placed in exactly the same location with no disturbance deeper than the existing pipeline, then there will be no adverse effect to cultural resources.

As a precaution that the conditions identified above are met, archaeological monitoring should be required during any construction in the identified sensitive areas.

Native American Consultation

Communication with Native American tribes listed in Appendix B should continue throughout project planning and implementation.

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1980b Archaeological Evaluation and Recommendations for Cayucos Sanitary District, Project C-0601454, Archaeological Investigation for Revised Alignment.
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1990d Results of Phase One Archaeological Surface Survey of Lot at 900 Pacific Avenue
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1984b Letter Report: An Archaeological Surface Reconnaissance of a Corridor along Sections of Cypress Mountain Road, near Cayucos.
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1990a Archaeological investigation of the W.P. Winn Property.
1990b Archaeological Investigation of the Point Motel Property, Toro Lane, Morro Bay.
1990c Archaeological Investigation of the Lloyd McConnell Property.
1990d Archaeological Investigation of the Rapp Property located at 1398 Cass Ave.
1990e Archaeological Investigation of the Brian Pratt Property.
1990f Archaeological Investigation of the David McLemon Property.
1990g Archaeological Investigation of the Elle and Marlene Cau Property.
1991a Archaeological Investigation of the Gates Property 1402 Pacific Avenue, Cayucos.
1991b Archaeological Investigation of the Brown Property, 9th and Pacific, Cayucos, CA
1991c Archaeological Investigation of the Newell Property.
1991d Archaeological Investigation of a portion of the Estero Shore Plant Chevron Pipe Line Company.

1991e Archaeological Investigation of the English Property.
1991f Archaeological Investigation of the Havener property
1992a Archaeological Investigation of the Fred Matthews Parcel.
1992b Archaeological Investigation of the Cunningham Property Studio Drive, Cayucos.
1993a Cultural Resource Investigation of the Hayes Parcel, 3245 Studio Drive, Cayucos.
1993b Cultural Resource Investigation of APN 064-171-73 Circle Lane Cayucos.
1993c Archaeological Monitoring of Demolition and Fill Placement at the Intersections of Cass, 23rd and 24th Streets, Cayucos.
1994a Cultural Resource Investigation of the McMillan Parcel (APN 64-424-22) Studio Drive, Cayucos, CA.
1994b Cultural Resource Investigation of the Gordon/Kasparian Project Cayucos, CA.
1994c Cultural Resource Investigation of the Roide Parcel , 9th Street, Cayucos.
1994d Archaeological Monitoring of the Cunningham Property Studio Drive, Cayucos.
1996a Cultural Resource Investigation of the Travis Parcel APN064-171-090, Circle Lane Cayucos.
1996b Cultural Resource investigation of the Kniffen Parcel, APN 064-262-038, Hacienda Drive and South Ocean Avenue, Cayucos.
1999a Cultural Resource Evaluation of the Morro Bay Power Plant Property.
1999b Cultural Resource Evaluation of the MacLane Property, APN 068-231-011, Mimosa Street, Morro Bay, Site CA-SLO-165.
1999c Cultural Resource Investigation of the Kirchner Parcel, 670 ponderosa, Morro Bay, APN 068-351-058.
2000a Cultural Resource Evaluation of the Morro Bay High School Bike Path, Morro Bay, California.
2000b Cultural Resource Review of Damage Caused to Prehistoric Site CA-SLO-16 by the City of Morro Bay.
2000c Archaeological Monitoring and Mitigation Report for the Morro Bay High School Varsity Ball Fields.
2000d Cultural Resource Investigation of the Walker Parcel, 370 Old Creek Road, Cayucos, APN 064-264-047 and 048.
2001a Cultural Resource Evaluation of the Israel Property, APN 068-323-005, Rockview Street, Morro Bay.
2001b Archaeological Testing Report for Site CA-SLO-2124, Duke Power Plant, Morro Bay.
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2002 Cultural Resource Evaluation of Lila Keiser Park, City of Morro Bay.
2003a Cultural Resource Investigation fo the Waldrip Parcel APN 064-242-030 2246 Pacific, Cayucos.
2003b Cultural Resource Investigation of the Joseph Parcel Lot 22, Block 21, 12th Street Cayucos.
2003c Cultural Resource Evaluation and Monitoring of Geotechnical Test Wells on the Ortega Parcel, APN 068-233-033, 525 Atascadero Road, Morro Bay, CA-SLO-15.
2004a Archaeological Mitigation and Monitoring Report for the Demolition of the Morro Bay Shell Station, Corner of North Main Street and Highway 41, Morro Bay, Archaeological Site CA-SLO-165.
2004b Cultural Resource Investigation of the Davis Parcel [APN064-241-039 and 040], 1998 Pacific, Cayucos.

2004c Archaeological mitigation and Monitoring Report for the Martin/Yoshimoto Project, 540 mimosa street, Morro Bay, Archaeological Site CA-SLO-165.
2004d Cultural Resource Investigation of the Martin Parcel [APN 064-182-009] 2000 Circle Drive, Cayucos.
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1991b Cultural Resources Survey and Impact Assessment for the Coastal Streams Project, Phase II, SLO County, California.
1992a Archaeological Survey of a lot at 42 12th Street in Cayucos, San Luis Obispo County, California.
1992b Archaeological investigations for the Proposed residential construction Project at 3140 Studio Drive in Cayucos.

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1994 Archaeological Evaluation of APN 064-412-018.
1995a Archaeological Survey of Two Residential lots in the City of Morro Bay, San Luis Obispo County, California. [APN 068-340-023/024]
1995b Archaeological Survey of a lot at #34 17th Street in Cayucos, San Luis Obispo County, California [APN 064-231-016]
1995c Archaeological Monitoring of Excavations for a residence at 17 10th Street in the Community of Cayucos, San Luis Obispo County, California [APN 064-153-028]
1995d Archaeological monitoring at CA-SLO-129: Excavations at the Adams Property on 22nd Street in Cayucos, San Luis Obispo County California.
1995e Archaeological Survey of Property at 565 mimosa Street in the city of Morro Bay, San Luis Obispo County, California [Parcel map MB-050]

1996 Archaeological Monitoring at CA-SLO-129: Investigations at the Aquilar Property on 23rd Street in Cayucos, San Luis Obispo County, California
1997a Phase I Archaeological Survey of a Commercial Property at 1840 Main Street in the City of Morro Bay, SLO County, California.
1997b Archaeological Monitoring at CA-SLO-129: Excavations at the Wasson Property on Cass Avenue in Cayucos, San Luis Obispo County, California.
1997c Archaeological Monitoring at APN 068-340-021, a Residential Property on mimosa Street in the City of Morro Bay, San Luis Obispo County ,California.
1997d Cultural Resources Survey and Impact Assessment for a property on Mimosa Street in the City of Morro Bay, San Luis Obispo Count, California [APN 068-231-008]
1997e Archaeological Survey of a Residential on Ponderosa Street in the City of Morro Bay, San Luis Obispo County, California [APN 068-351-051]
1997f Cultural Resources Survey and impact Assessment for a residential property on Mimosa Street in the City of Morro Bay, San Luis Obispo County, California [APN 068-231-024]
1997g Archaeological monitoring at APN 068-340-020, a Residential Property on Mimosa Street in the City of Morro Bay.
1998a Cultural Resources Survey, Evaluation of impacts and mitigation plan for a Stream Stabilization Project near Archaeological site CA-SLO-1158 in the City of Morro Bay.
1998b Cultural Resources Survey and Impact Assessment for a Residential Property on Rockview Street in the City of Morro Bay, San Luis Obispo, California. [APN 068-322-016]
1998c Cultural Resources Survey and impact Assessment for a Property at 225 atascadero Road in the City of morro Bay, San Luis Obispo County, California [APN 065-182-006]
1999 Cultural Resources Survey and Impact Assessment for a residential Property on 13th Street in Cayucos, San Luis Obispo county, California APN 073-095-007.
2001 Cultural Resources Survey and impact Assessment for a Series of Contiguous Residential and Commercial properties on Main Street and Sunset Avenue in the City of Morro Bay, SLO County.
2003 Archaeological Testing at the Morro Bay Chevron Station, 1798 Main Street in the City of Morro Bay, San Luis Obispo, California.

2004a Cultural Resources Survey and Impact Assessment for a Residential Property on Pacific Avenue in Cayucos, San Luis Obispo County, California [APN 064-225-912]
2004b Cultural Resource Survey and Impact Assessment for the Estero Bay Methodist Church property in the City of Morro Bay, San Luis Obispo County, California [APN 065-149-010]
2007 Archaeological Investigations at Site CA-SLO-165: Dating and Defining Anthropic Soils Along Rockview Street in te City of Morro Bay, San Luis Obispo County, California.
2010 Cultural Resources Survey and Impact Assessment for a Residential Property at 3480 Studio Drive in Cayucos, San Luis Obispo County, California [APN 064-449-021]

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1987 Cultural Resources Survey and Impact Assessment for Tentative Tract No. 1529 in the City of Morro Bay, San Luis Obispo County, California.
1991 Cultural Resources Survey and Impact Assessment for the Coastal Streams Project, Phase II, San Luis Obispo county, California.
1994 Cultural Resources Survey and Impact Assessment for APN 066-332-004, a Commercial Lot in te City of Morro Bay, San Luis Obispo County, California.

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1989 Letter Report: Cultural Resources Investigation for the Proposed redevelopment of Five lots Located at the Intersection of Cass Avenue and 24th Street in the Village of Cayucos.

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1977 Archaeological Evaluation of the Proposed Modification for the Morro Bay Wastewater Facility.

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2002 Cultural Resources Survey of the Chevron Station Located at SE Corner of Hwy 41 and Main Street, Morro Bay, San Luis Obispo, California.

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1986a Archaeological Survey Report on Atascadero State Beach.
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EXHIBIT A

Records and Literature Search
Central Coast Information Center
University of California
Santa Barbara, California

California
Archaeological
Inventory

SAN LUIS OBISPO AND
SANTA BARBARA COUNTIES

Central Coast Information Center
Department of Anthropology
University of California, Santa Barbara
Santa Barbara, CA 93106-3210
(805) 893-2474
FAX (805) 893-8707
centralcoastinfo@gmail.com

4/20/2016

Nancy Farrell
Cultural Resource Management Services
829 Paso Robles Street
Paso Robles, CA 93446

Re: Cayucos Community Services District Wastewater Treatment Upgrade

The Central Coast Information Center received your record search request for the project area referenced above, located on the Cayucos, Morro Bay North, and Morro Bay South USGS 7.5′ quad(s). The following reflects the results of the records search for the project area and a one-half mile radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: ■ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Resources within project area:	SLO-154, -164, -165, -879, -1187
Resources within ½-mile radius:	32 resources (see enclosed maps and bibliography)
Reports within project area:	16 reports (see enclosed maps and bibliography)
Reports within ½-mile radius:	168 reports (see enclosed maps and bibliography)

Resource Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	■ not requested	☐ nothing listed
Report Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	■ not requested	☐ nothing listed
Resource Record Copies:	■ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	■ not requested	☐ nothing listed
OHP Historic Properties Directory:	☐ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☐ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☐ nothing listed

Caltrans Bridge Survey:	☐ enclosed	☐ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	■ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☐ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	■ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	■ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☐ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	■ not requested	☐ nothing listed
Soil Survey Maps:	☐ enclosed	■ not requested	☐ nothing listed

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of California Historical Resources Information System (CHRIS) data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the CHRIS.

Sincerely,

Jessika Akmenkalns, M.A.
Assistant Coordinator

EXHIBIT B

Letter To Native American Heritage Commission
Response From Native American Heritage Commission
List of Native Americans and Groups
Letter To Native Americans and Groups
Response From Native Americans and Groups

CRMS
CULTURAL RESOURCE MANAGEMENT SERVICES

Cultural Resource Management Services
829 Paso Robles Street
Paso Robles, CA 93446
Phone 805-237-3838
Fax 805-237-3849

April 11, 2016

Ms. Katy Sanchez, Program Analyst
California Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691

RE: Cayucos Community Services District, Sustainable Wastewater Treatment Project
Various Locations Near Cayucos and Morro Bay, CA

Dear Ms. Sanchez:

The Cayucos Community Services District (CCSD) is proposing a major infrastructure change to the manner is which they deal with sewage and wastewater treatment. Presently they rely on the City of Morro Bay to treat their sewage and wastewater. Now they intend to construct their own treatment facility.

Cultural Resource Management Services (CRMS) has been retained, to prepare a Phase I surface survey as well as consult with interested Native Americans and Native American groups relative to the proposed construction project.

Please review the sacred lands files for any Native American Sacred resources or sites that may be within or adjacent to the area of potential effect (APE). Please verify that any sacred sites in the vicinity are not in the APE. The project area is within the unincorporated limits of the community of Cayucos and within the incorporated limits of the City of Morro Bay, and is identified on the attached portion of the USGS Cayuycos and Morro Bay North 7.5' Quadrangle. The study area fall within, Range 10 East Township 28 and 29 South MDM. Since most of Cayucos and Morro Bay was part of a rancho, there are no section lines. The candidate sites are depicted as salmon colored polygons. The linear portion is shown by the heavy blue lines.

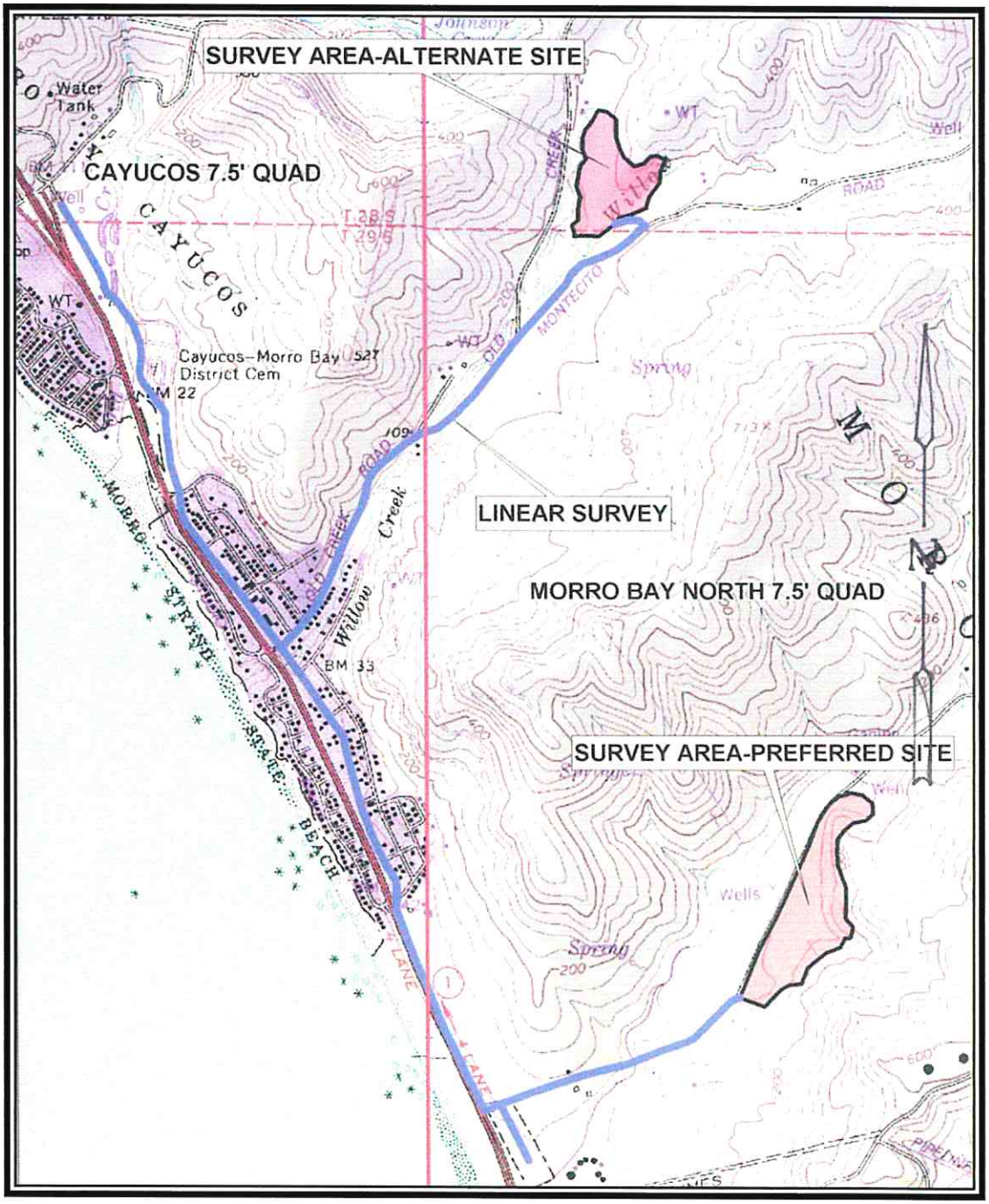
Also provide a list, including names and addresses, of Native American individuals and organizations who may have knowledge of cultural resources in the project area; or who may have a concern or wish to comment on the project.

If you have any questions contact me at the phone number or address shown, or by email ronrose@crms.com. We look forward to your reply.

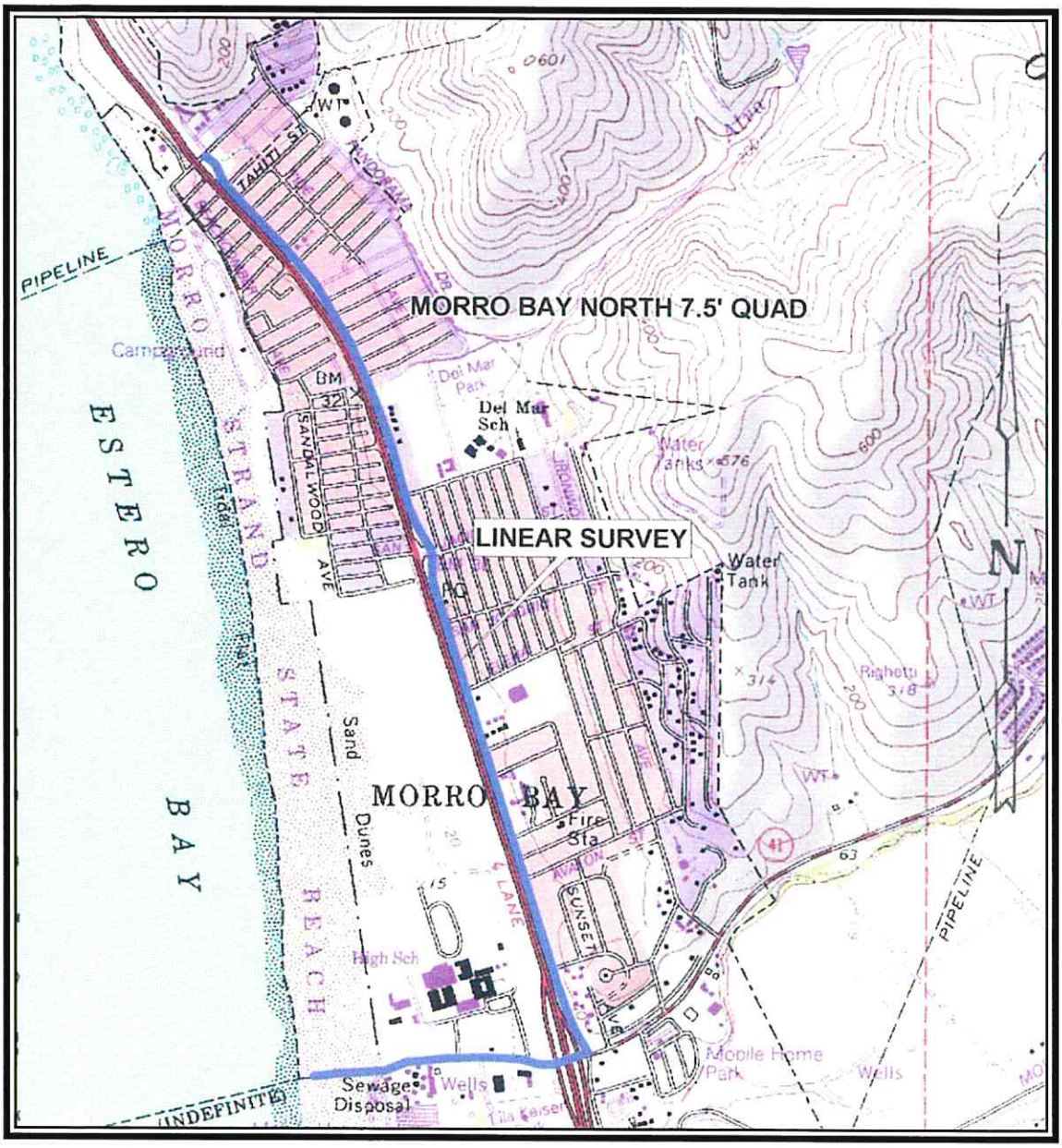
Best regards,

Ron Rose
Vice President

Encl: Portion of USGS 7.5' Quadrangle Cayucos and Morro Bay North, CA



Portion of USGS 7.5' Quadrangle, Cayucos and Morro Bay North



Portion of USGS 7.5' Quadrangle, Morro Bay North

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

April 20, 2016

Ron Rose
Cultural Resource Management Services

Sent by e-mail: ronrose@crms.com
Number of Pages: 3

RE: Proposed Cayucos Community Services District, Sustainable Wastewater Treatment Plant Project, Community of Cayucos, Cayucos and Morro Bay North USGS Quadrangles, San Luis Obispo County, California

Dear Mr. Rose:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measurers.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the USGS quadrangle information provided with negative results.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

CRMS
CULTURAL RESOURCE MANAGEMENT SERVICES

Cultural Resource Management Services
829 Paso Robles Street
Paso Robles, CA 93446
Phone 805-237-3838
Fax 805-237-3849

April 28. 2016

XXXXXXXXXXXXXXXXXXX
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XXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXX

RE: Phase I Archaeological Inventory Survey, Cayucos Community Services District (CCSD)Alternate Sewer Locations Toro Creek Site 5, Old Creek/Montecito/Willow Creek Site 3

Dear XXXXXXXX:

The Cayucos Community Services District is proposing the construction of a new sustainable waste water treatment facility. From a multitude of candidate locations, they have now settled on one of two final candidate locations in or near Cayucos. One is on Old Creek/Montecito Road known as Location #3, and one on Toro Creek Road, and is identified as Location #5. In addition, for the final location, connecting pipelines, lift stations, percolation ponds, and other infrastructure in or near the identified area will be installed.

Cultural Resource Management Services (CRMS) has been retained by Firma Consultants, Inc., and the CCSD to conduct a Phase I surface investigation of the two locations together with other locations for the identified necessary infrastructure to complete the wastewater treatment system. In addition, CRMS has been charged with the preparation of a Native American early participation notice as well as advising interested Native Americans, tribes and groups of the project in accordance with AB52.

The location of the various aspects of the project are identified on the attached portions of the USGS 7.5' Quadrangle, Cayucos, and the USGS 7.5' Quadrangle, Morro Bay North. On those quadrangles, it is further identified as being in Range 10 East Township 28 and 29 South MDM. Since most of Cayucos and Morro Bay were part of a rancho, there are no section lines. The candidate sites are depicted as salmon colored polygons. The linear portion is shown by the heavy blue lines.

A search at the Native American Heritage Commission (NAHC) determined that there are no Sacred Lands or Sites within the area of Potential effect (APE). The mailing list for this letter was obtained from the NAHC, and the County of San Luis Obispo Department of Planning and Building. Please contact me as soon as possible if you or your organization have any information about the study area, including any knowledge of any possible Sacred Sites, or concerns about the anticipated project. You may phone me or write me at the numbers and address listed or email me at: ronrose@crms.com. Once again, if you wish to comment, respond as soon as possible.

Thanks for your help.

Best regards

Ron Rose
Vice President

Enclose: Portions of USGS 7.5' Quadrangle, Cayucos and Morro Bay North

The letter on the previous page was sent to the following Native Americans and groups. XXXX substituted for salutation and address.

Native American Heritage Commission
Tribal Consultation List
San Luis Obispo County
April 20, 2016

Santa Ynez Band of Mission Indians
Vincent Armenta, Chairperson
P.O. Box 517 Chumash
Santa Ynez , CA 93460
varmenta@santaynezchumash.org
(805) 688-7997
(805) 686-9578 Fax

yak tityu tityu - Northern Chumash Tribe
Mona Olivas Tucker, Chairwoman
660 Camino Del Rey Chumash
Arroyo Grande , CA 93420
olivas.mona@gmail.com
(805) 489-1052 Home
(805) 748-2121 Cell

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stennslie, Chair
365 North Poli Ave Chumash
Ojai , CA 93023
jtumamait@hotmail.com
(805) 646-6214

Northern Chumash Tribal Council
Fred Collins, Spokesperson
67 South Street Chumash
San Luis Obispo , CA 93401
fcollins@northernchumash.org
(805) 801-0347 (Cell)

Salinan Tribe of Monterey, San Luis Obispo Counties
Patti Dunton, Tribal Administrator
7070 Morro Road, Suite A Salinan
Atascadero , CA 93422 Chumash
salinantribe@aol.com
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Xolon-Salinan Tribe
Karen White, Council Chairperson
PO Box 7045 Salinan
Spreckels , CA 93962
blukat41@yahoo.com
831-238-1488

Coastal Band of the Chumash Nation
Mia Lopez, Chairperson
Chumash
cbcn.nahc.sb@gmail.com
(805) 324-0135

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Cayucos Community Services District, Sustainable Wastewater Treatment Plant Project, Community of Cayucos, Cayucos and Morro Bay North USGS Quadrangles, San Luis Obispo County, California.

Chief Mark Steven Vigil
San Luis Obispo County Chumash Council
1030 Richie Road
Grover Beach, CA 93433

Response To Letters Written

Mona Tucker
Email June 11, 2016

Regarding the proposed Cayucos Sustainable Waste Water Treatment Facility:
This will be a large project with considerable ground disturbing infrastructure. The likelihood of encounter cultural resources is high, so archaeological investigation prior to permitting is needed. The results of the testing has to be considered before any project goes forward.

Patti Dunton
Email June 16, 2016

From what I can tell, the Tribe would prefer the Old Creek site over the Toro Creek site because of all the already known cultural and burial sites along Toro Creek. We are unaware of these same kind of resources at the Old Creek site. There may be resources there, but we are unaware of any.

Even though there were only two responses to the early participation notice dated April 28, 2016, and subsequent efforts, little response to the initial contact does not imply no interest, since the tribes receive much similar correspondence monthly from private parties and state and federal agencies. Limited tribal resources and government protocol impact the response process. As the project planning continues, or-going efforts should be made to contact and work with the tribes, arranging face-to-face meetings. This on-going consultation relationship with the tribes may enhance information sharing, and benefit the project.

Applied EARTHWORKS Inc.

811 El Capitan Way, Suite 100
San Luis Obispo, CA 93401-1920
O: (805) 594-1590 | F: (805) 594-1577

INTERIM REPORT: SUMMARY OF PHASE 2 TESTING AT CA-SLO-879/H

CAYUCOS SUSTAINABLE WATER PROJECT

Prepared by
Applied EarthWorks, Inc.

January 30, 2017

PROJECT BACKGROUND

The Cayucos Community Service District (CSD) is planning to develop a new water treatment plant on a 5-acre parcel on Toro Creek Road approximately 0.75 mile northeast of State Route 1 (SR 1). CSD will install pipelines along Toro Creek Road to connect the new plant with an existing pumping station at SR 1. Other project elements include abutments on either side of Toro Creek to facilitate pipeline spans across the creek. The proposed pipelines along Toro Creek Road cross through CA-SLO-879/H, a large and complex archaeological site containing both prehistoric and historic components. The site is a significant historical resource that was previously judged eligible for inclusion in the California Register of Historical Resources (CRHR) (Fugro West 1994; Gibson 1980; Lloyd et al. 2005).

In support of the CSD Sustainable Water Project (Project), Applied EarthWorks, Inc., (Æ), conducted Phase 2 archaeological testing to document cultural deposits along Toro Creek Road and to collect data to assess potential Project impacts on those deposits. The treatment plant site itself is not located inside the currently defined boundary of CA-SLO-879/H, and surface inspection of the parcel found no evidence of cultural materials; however, the location and topography indicate that this parcel has a high sensitivity for buried archaeological deposits. Therefore, buried site testing was conducted at the plant site to determine whether buried cultural deposits are present. The archaeological fieldwork was completed between August 15 and September 6, 2016.

CA-SLO-879/H

CA-SLO-879/H is a large complex habitation area with varying concentrations of debris, including flaked stone items, ground stone, bedrock milling features, marine shell, and midden deposits, along with human remains; the historic component includes the remnants of Chevron's Estero Marine Terminal as well as a ranching and agricultural complex along Toro Creek Road. The site was first recorded by Charles Dills (1979) and reported on by Robert Gibson (1980). Today, CA-SLO-879/H also incorporates several other previously recorded sites: CA-SLO-181, -1187, and -1378 (Berg et al. 2014; Dietler and Laurie 2010; Fugro West 1994; Price et al. 2004). Previous studies have shown cultural deposits extend up to 1 meter deep in some areas, and possibly deeper (Lloyd et al. 2005). Despite considerable disturbance of portions of the site from Chevron's Estero Marine Terminal facilities, State Route 1 bridge construction, and Toro Creek Road, substantial intact deposits remain in portions of the site. Toro Creek Road extends across the northwestern part of CA-SLO-879/H.

During Æ's 2005 study of CA-SLO-879/H (outside of the current study area), three temporally diagnostic *Olivella* shell beads were recovered between 30 and 70 centimeters below surface. These bead types are associated with the Late Period, which is consistent with the two Late Period radiocarbon dates obtained from midden samples (Lloyd et al. 2005). Additionally, geoarchaeological study revealed a landscape chronology showing that early Holocene sedimentation ended between 4000 and 3000 B.P.; subsequent prehistoric settlement occurred on stabilized landforms dating to around 1300 B.P. Æ determined that the site complex should be considered a significant historical resource under the California Environmental Quality Act (CEQA).

Testing Methods and Objectives

Æ conducted buried site testing within the proposed treatment plant location and Phase 2 testing within San Luis Obispo County's right of way along Toro Creek Road. The objectives of testing were to determine where subsurface cultural deposits exist within the Project area, and to investigate the integrity and archaeological data potential of those deposits. Special focus was given to interpreting soil disturbances resulting from previous construction along Toro Creek Road.

Buried Site Testing

Æ excavated 22 backhoe trenches within the 5 acre proposed treatment plant parcel (Figure 1). These trenches were excavated systematically at 30 to 50 meter intervals, to a depth of at least 1 meter. Excavation was terminated when a basal layer of sandy clay alluvium with abundant gravel was encountered. One bucket of soil from each 20 centimeter level was screened through 1/4-inch hardware mesh to look for cultural material. Numbers and types of artifacts, if present, sediment descriptions, and brief soil profiles were compiled for each backhoe trench.

Phase 2 Testing

Æ excavated 53 shovel test pits (STPs) along both sides of Toro Creek Road (Figure 2). The shovel test pits were spaced at approximately 30 meter intervals on alternating sides of the road. Each STP was 50 centimeters in diameter and excavated in 20-centimeter levels until bedrock or culturally sterile sediments were encountered. All but six of the STPs were augered to lower depths to gain a picture of the study area's soils and depth of prior disturbance along the road. All excavated sediments were dry screened through 1/4-inch hardware mesh. Numbers and types of cultural materials and a brief sediment description were recorded by level on a Shovel Test Pit Record. Cultural material observed in the STPs was noted and described and then returned to the sampling unit during backfilling.

Based on the results of STP excavations, Æ placed four test excavation units (TEUs) along the road in areas where artifact density was highest and soil profiles might be exposed to assess integrity and composition of buried archaeological deposits in this part of the site (Figure 2). Soils from TEUs were processed through 1/8- or 1/16-inch wet screens to ensure all cultural material was recovered. TEU 1 was placed on a prominent knoll along the north side of Toro Creek Road, just east of the creek crossing. This 1 by 1 meter unit provided a controlled sample of an intact portion of the site

east of the creek. TEU 2 was placed on top of a prominent landform along the south side of Toro Creek Road, east of a large rock outcrop that contains bedrock mortars. The 1 by 1 meter unit was situated above the current road grade in an area with a dense midden, on a landform cut by Toro Creek Road. It provided a controlled sample of intact midden to assess the site's data potential and for comparison to the deposits elsewhere within the Toro Creek Road study area.

TEU 3 was placed along the northern margin of Toro Creek Road across from the prominent bedrock outcrop between two highly productive shovel test pits (STPs 10 and 12). Due to disturbed soils and work constraints, the unit size was reduced from 1 meter by 50 centimeters to 50 by 50 centimeters at the 20 centimeter level. This allowed for all recovered materials to be wet screened and processed within the limited time available, while still recovering the necessary controlled data.

TEU 4 was on the northern margin of Toro Creek Road, south of the exposed midden, in an area where the natural terrain slope intersected the disturbed road grade. This area also had high artifact density in adjacent shovel test pits (STPs 14 and 16). Due to disturbed soils and work constraints, the unit size was reduced from 1 meter by 50 centimeters to 50 by 50 centimeters at the 30 centimeter level.

Findings

Testing along Toro Creek Road and at the proposed plant site provided information regarding the distribution, density, content, and integrity of archaeological remains in these portions of this large and complex site. The findings presented below are preliminary; laboratory processing and analysis of the materials recovered from CA-SLO-879/H are continuing, and a final testing report will present the details of these analyses.

Buried Site Testing

Buried site testing at the treatment plant site found that no substantial subsurface cultural deposits are present (Table 1). Four of the 22 backhoe trenches produced one or two Pismo clam shell fragments in non-midden sediments. No artifacts or other cultural remains were present. Two additional trenches contained modern debris, while the remainder were culturally sterile (Figure 1). This lack of cultural material indicates that proposed construction of the treatment plant itself will not impact archaeological resources.

Phase 2 Testing

Fieldwork helped to define the distribution, density, content, and integrity of archaeological deposits along Toro Creek Road (Table 2). Fieldwork demonstrated that most of the tested area either lacks cultural materials, contains very sparse remains in disturbed contexts, or contains intact cultural material buried under deep layers of fill deposited during road construction. As shown on Figure 2, the Toro Creek Road study area can be divided into three zones. Zones 1 and 3 contain very sparse remains in disturbed contexts. Zone 1 extends up Toro Creek Road from State Route 1 for approximately 0.16 mile. Zone 3 extends east from Toro Creek for 0.44 mile up to the treatment plant parcel. Cultural materials in Zones 1 and 3 lack the quantity, variety, integrity or contextual

associations needed to offer important new information on local prehistory or history; thus, these portions of the site do not contain qualities that make the site eligible for the CRHR.

Zone 2 contains high density cultural materials in midden soils. Although the density is high, many of the STPs revealed a mix of road fill and disturbed sediments (Table 2). Intact deposits were revealed in STPs 8, 11, 12, 15, 22, and 26.

As part of the study, seven shell samples were sent to Beta Analytic for radiocarbon dating. Most dates fall within a relatively narrow range of time between 840 and 385 B.C. This includes all three dates from TEU 2 and all but two from TEUs 3 and 4. These dates suggest that this part of the site contains a single occupational component, increasing the importance of the archaeological data in Zone 2 and lessening the importance of road disturbance. This portion of the site clearly embodies the significant qualities of CA-SLO-879/H.

Summary

Testing along Toro Creek Road determined that the road crosses through CA-SLO-879/H for a distance of approximately 500 meters (1640 feet; 0.31 mile), from the intersection with State Route 1 to a point east of Toro Creek. For about half this distance (800 feet; 243 meters, 0.15 mile) the road crosses high density midden deposits (Zone 2 on Figure 2). This section of CA-SLO-879/H (i.e., Zone 2) has substantial archaeological data potential and thus embodies the qualities that make the site eligible for inclusion in the CRHR. Any direct disturbance of archaeological deposits in Zone 2 would constitute a significant impact on cultural resources. Impacts can be reduced to less than significant levels through implementation of the mitigation measures described below.

Buried site testing at the treatment plant found no evidence of buried cultural resources. Thus, construction in this area will not present a significant impact.

Recommendations

For the purposes of CEQA review, Zone 2 contains significant portions of archaeological site CA-SLO-879/H. Any direct disturbance of archaeological deposits in Zone 2 would constitute a significant impact on cultural resources. Preservation in place through avoidance is always the preferred mitigation alternative under CEQA [Guidelines Section 15126.4(b)(3)(A)]. In this case, avoidance is not feasible because of the great extent of the site and the need to connect with the pumping station near the intersection of Toro Creek Road and State Route 1. Any new pipeline reroute would have to cross other portions of the site, creating new impacts. Additionally, moving the pipelines away from Toro Creek Road would require travel across the site for construction, maintenance, and emergency access. The following alternative measures are therefore proposed to reduce, minimize, and compensate for project impacts.

1. The proposed pipelines along Toro Creek Road shall be placed only on the north side of the road and shall be directionally drilled under the maximum depth of cultural deposits. Three bore pits shall be installed along the pipeline alignment in previously disturbed areas, where cultural materials are sparse and lack integrity. The exact location of the bore pits and

segment to be directionally drilled shall be determined when the Final Cultural Resources Impact Assessment Report is completed.

2. If at any point, the pipeline design requirements specified in the Cultural Resources Impact Assessment Report cannot be met, the project shall be halted and San Luis Obispo County and other responsible agencies contacted to determine the next course of action to protect historical or tribal cultural resources in compliance with California and federal law.

3. All construction work related to pipeline installation along Toro Creek Road and at the treatment plant site shall be monitored by an archaeologist and Native American representatives. Prior to the start of construction, all personnel shall participate in a Worker Environmental Awareness Program that highlights the cultural sensitivity of the project area.

4. If previously unidentified and potentially significant cultural resources are uncovered during construction, work in the immediate vicinity of the finds shall be halted and San Luis Obispo County and other responsible agencies contacted to determine the next course of action.

5. To mitigate potential effects to tribal cultural resources, the CSD shall place some of the portions of parcels 8 and 10 owned by the CSD between Toro Creek Road and Toro Creek in a conservation easement in favor of an appropriate entity to protect and manage the land for agriculture uses only.

6. The final Cultural Resource Impact Assessment Report shall include a full technical analysis of all artifacts and other cultural remains collected during the Phase 2 study.

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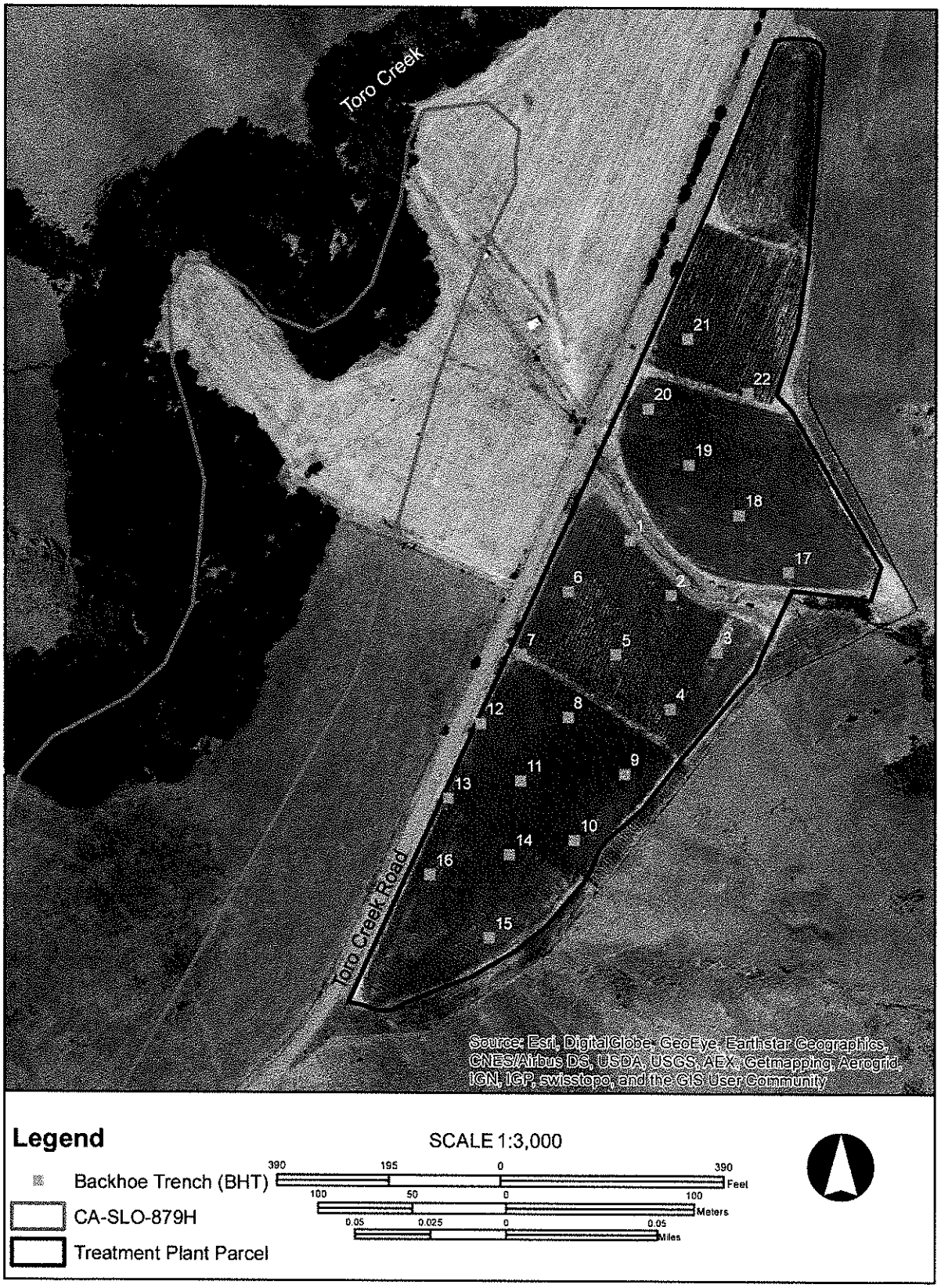

Figure 1 Cayucos CSD backhoe test locations.

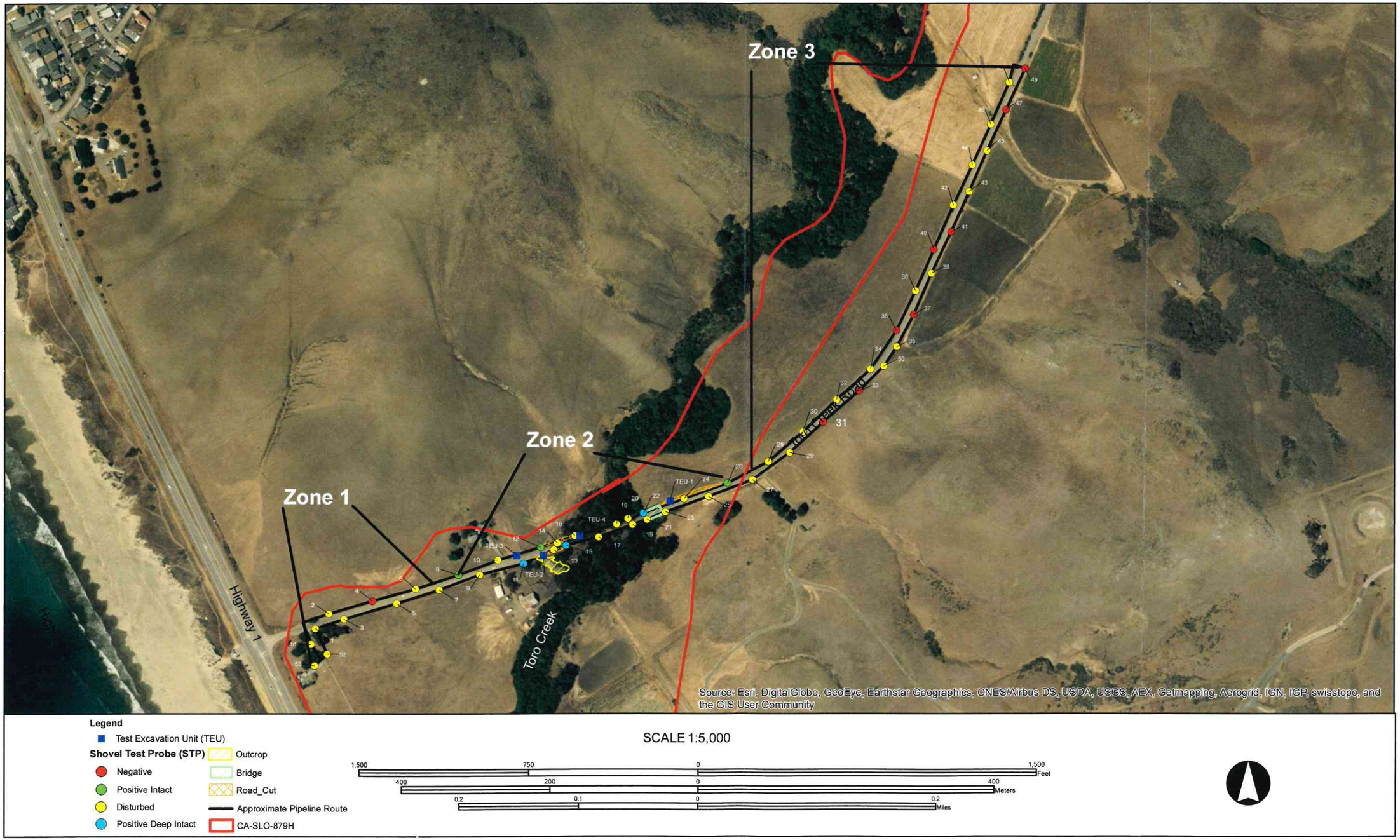

Figure 2 **Cayucos CSD test unit locations and sensitivity zones.**

Table 1
CA–SLO–879/H Backhoe Trench (BHT) Excavated Unit Summary

Unit	Maximum Depth (cm)	Maximum Depth of Cultural Material (cm)	Depth of Disturbed Soils (cm)	Depth of Intact Soils (cm)	Cultural Material Summary (#/type [a])
BHT–1	160	—	0–30	30–160	—
BHT–2	180	—	0–10	10–180	—
BHT–3	140	—	0–15	15–140	—
BHT–4	120	—	0–10	10–120	—
BHT–5	120	—	0–25	25–120	—
BHT–6	120	40	0–20	20–120	1 SHL
BHT–7	100	—	0–30	30–100	—
BHT–8	160	—	0–15	15–160	—
BHT–9	140	—	0–40	40–140	—
BHT–10	140	20	0–45	45–140	1 SHL
BHT–11	120	—	0–40	40–120	—
BHT–12	160	—	0–20	20–160	—
BHT–13	180	—	0–15	15–180	—
BHT–14	120	20	0–35	35–120	1 MTL
BHT–15	180	—	0–40	40–180	—
BHT–16	160	20	0–15	15–160	2 SHL
BHT–17	140	—	0–10	10–140	—
BHT–18	160	—	0–35	35–160	—
BHT–19	160	20	0–15	15–160	1 GLS; 1 MTL
BHT–20	160	—	0–10	10–160	—
BHT–21	160	—	0–30	30–160	—
BHT–22	160	—	0–15	15–160	—

[a] SHL = shell; GLS = glass; MTL = metal.

Table 2
CA–SLO–879/H Pipeline Excavated Unit Summary

Unit	Maximum Depth (cm)	Maximum Depth of Cultural Material (cm)	Depth of Disturbed Soils (cm)	Depth of Intact Soils (cm)	Cultural Material Summary (#/type[a])
STP–1	80/100	40	—	0–100	45 GLS; 2 SHL
STP–2	80/NA	40	—	0–80	1 BON; 2 DEB; 1 GLS
STP–3	80/105	40	—	0–105	1 CER; 3 DEB; 2 GLS
STP–4	100/210	100	—	0–210	3 DEB; 1 MTL; 15 SHL
STP–5	100/120	60	0–40	40–120	1 DEB; 6 GLS; 3 SHL
STP–6	80/150	40	0–40	40–150	1 DEB
STP–7	80/125	80	0–60	0–125	3 GLS; 12 SHL
STP–8	80/115	60	0–40	40–115	1 CER; 1 DEB; 9 GLS; 12 SHL
STP–9	100/160	120	0–40	40–160	3 BON; 2 DEB; 2 GLS; 20 SHL
STP–10	100/125	80	0–40	40–125	1 BIF; 1 EMF; 5 DEB; 67 SHL; 9 GLS
STP–11	80/160	130	0–15	15–160	4 DEB; 190 SHL; 1 GLS
STP–12	60/NA	40	0–20	20–60	31 SHL
STP–13	60/NA	40	0–20	20–60	3 DEB; 365 SHL
STP–14	50/NA	40	0–20	20–50	12 DEB; 150 SHL
STP–15	80/90	90	0–40	40–90	47 DEB; 2 OLV; 780 SHL
STP–16	100/110	110	0–80	80–110	4 DEB; 122 SHL
STP–17	80/120	120	0–80	80–120	1 BIF; 1 OLV; 382 SHL; 1 NAI
STP–18	80/150	80	0–100	100–150	1 BIF; 2 DEB; 73 SHL
STP–19	80/100	80	0–100	—	1 DEB; 55 SHL; 2 GLS
STP–20	80/98	80	0–98	—	3 DEB; 85 SHL; 3 GLS
STP–21	80/180	160	0–150	150–180	12 SHL; 1 BON; 1 GLS
STP–22	80/165	165	0–35	35–165	1 DEB; 12 SHL; 1 GLS; 1 WOD
STP–23	80/140	40	0–80	80–140	2 SHL
STP–24	80/200	60	0–200	—	1 DEB; 25 SHL

Table 2
CA–SLO–879/H Pipeline Excavated Unit Summary

Unit	Maximum Depth (cm)	Maximum Depth of Cultural Material (cm)	Depth of Disturbed Soils (cm)	Depth of Intact Soils (cm)	Cultural Material Summary (#/type[a])
STP–25	80/185	40	0–38	38–185	3 SHL; 2 GLS
STP–26	80/105	60	0–20	20–105	1 DEB; 43 SHL
STP–27	80/90	80	0–90	—	37 SHL; 2 GLS
STP–28	80/100	80	0–90	90–100	4 SHL; 2 BON; 3 GLS; 1 NAI; 1 WOD
STP–29	60/75	60	0–75	—	3 GLS; 1 MTL; 1 NAI
STP–30	80/100	60	0–50	50–100	11 SHL; 2 GLS
STP–31	60/140	60	0–40	40–140	—
STP–32	60/110	40	0–40	40–110	2 GLS; 2 MTL
STP–33	60/80	—	0–40	40–80	—
STP–34	60/75	20	0–40	40–75	1 SHL
STP–35	50/NA	40	0–40	40–50	1 DEB; 2 MTL
STP–36	60/80	—	0–60	60–80	—
STP–37	60/180	—	0–40	40–180	—
STP–38	60/150	40	0–40	40–150	2 GLS; 1 NAI
STP–39	60/110	60	0–30	30–110	1 SHL; 3 GLS
STP–40	60/130	40	0–40	40–130	—
STP–41	60/160	20	0–60	60–160	1 GLS
STP–42	60/85	40	0–40	40–85	4 SHL; 1 BON
STP–43	60/120	40	0–60	60–120	2 BON
STP–44	60/125	40	0–40	40–125	10 MTL
STP–45	60/130	20	0–20	20–130	3 SHL
STP–46	60/150	40	0–60	60–150	1 SHL
STP–47	60/90	20	0–40	40–90	1 GLS
STP–48	60/80	40	0–40	40–80	1 GLS; 1 MTL

Table 2
CA–SLO–879/H Pipeline Excavated Unit Summary

Unit	Maximum Depth (cm)	Maximum Depth of Cultural Material (cm)	Depth of Disturbed Soils (cm)	Depth of Intact Soils (cm)	Cultural Material Summary (#/type[a])
STP–49	60/90	—	0–90	—	—
STP–50	47/NA	20	0–47	—	3 SHL; 4 GLS
STP–51	60/105	40	0–40	40–105	3 SHL; 4 GLS
STP–52	60/90	40	0–40	40–90	1 DEB; 21 SHL; 2 GLS; 1 BRK
STP–53	60/80	40	0–5	5–80	1 DEB; 1 SHL
TEU–1	60/NA	60	0–20	20–60	29 DEB; 11 FAR; 6 BON; 277 SHL
TEU–2	120/NA	120	0–30	30–120	2 BIF; 2 OLV; 500 DEB; 90 FAR; 23 BON; 20,000+ SHL; 48 GLS
TEU–3	90/NA	40	0–40	40–90	5 DEB; 21 SHL
TEU–4	100/NA	100	0–60	60–100	1 BIF; 62 DEB; 478 SHL; 1 BON; 6 GLS

[a] BIF = biface; BON = bone; BRK = brick; CER = ceramic; DEB = debitage; EMF = edge-modified flake; FAR = fire-altered rock; GLS = glass; MTL = metal; NAI = nail; SHL = Shell; OLV = Olivella; WOD = wood.

Appendix F USDA Programmatic Agreement with the SHPO and SHPO Concurrence Letter

NOTE: The Rural Economic and Community Development Services is currently known as USDA Rural Development.

PROGRAMMATIC AGREEMENT
AMONG
THE RURAL ECONOMIC AND COMMUNITY DEVELOPMENT SERVICES, THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING THE IMPLEMENTATION OF THE RURAL ECONOMIC AND COMMUNITY DEVELOPMENT SERVICES' PROGRAMS IN CALIFORNIA

WHEREAS, the California Offices of the Rural Economic and Community Development Services (RECDS) is authorized under the Consolidated Farm and Rural Development Act (7 U.S.C. 1921, as amended) and the Housing Act of 1949 (42 U.S.C. 1471, as amended) to carry out various activities and programs assisting rural development; and

WHEREAS, the RECDS has determined that the implementation of its activities and programs may have an effect on properties that are listed in or eligible for inclusion in the National Register of Historic Places (National Register), and has consulted with the Advisory Council on Historic Preservation (Council) and the California State Historic Preservation Officer (SHPO) pursuant to Section 800.13 of the regulations, 36 CFR Part 800, implementing Section 106 of the National Historic Preservation Act 16 U.S.C. 470f; and

WHEREAS, many of RECDS' programs and activities subject to compliance with Section 106 of the National Historic Preservation Act have a minimal potential to affect historic properties;

NOW, THEREFORE, the RECDS, the Council, and the SHPO agree that the RECDS shall administer the subject activities and programs in accordance with the following stipulations to satisfy their Section 106 responsibilities for individual undertakings.

STIPULATIONS

The RECDS shall ensure that the following measures are carried out:

I. APPLICABILITY

This Programmatic Agreement (PA) outlines procedures which will substitute for the Section 106 process outlined in the Council's regulations, 36 CFR Part 800, for all RECDS undertakings. This PA does not apply to the Housing Preservation Grants program, that is addressed in a separate agreement between the FmHA, the Council, and the National Conference of State Historic Preservation Officers executed in 1986, and which still applies to the Housing Preservation Grants now administered by the RECDS.

II. DEFINITIONS

A. The definitions included in the Council's regulations at 36 CFR 800.2 apply to this PA, and selected definitions are set out in this Stipulation for reference:

1. UNDERTAKING means any project, activity, or program that can result in changes in the character or use of historic properties, if any such historic properties are located in the area of potential effects. The project, activity, or program must be under the direct or indirect jurisdiction of the RECDS; or licensed, or assisted by the RECDS to be covered by this PA. Undertakings include new and continuing projects, activities, or programs, and any of their elements.

2. AREA OF POTENTIAL EFFECT (APE) means the geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist.

3. HISTORIC PROPERTY means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register.

4. INDIAN TRIBES means the governing body of any Indian tribe, band, nation, or other group that is recognized as an Indian tribe by the Secretary of the Interior and for which the United States holds land in trust or restricted status for that entity or its members.

B. Other selected definitions included for reference have been set out or are implicit in the descriptions of the participants in the Section 106 process included in 36 CFR 800.1(c):

1. INTERESTED PERSONS are those organizations and individuals that are concerned with the effects of an undertaking on historic properties. For purposes of this PA, Indian tribes shall be described as interested persons, but retain the rights to participate in the Section 106 review detailed in this PA pursuant to 36 CFR 800.1(c)(ii).

2. APPLICANTS for RECDS assistance include private individuals, businesses, not-for-profit groups, and public agencies that are applying for financial assistance or approval actions from the RECDS. The requested assistance or approvals may relate to housing, small rural businesses, or rural community facilities and infrastructure improvements. RECDS may request that the Applicant prepare the necessary information and analyses to fulfill the requirements of this PA, and may permit the Applicant to consult with the SHPO to define and perform the RECDS's identification efforts under Stipulation V.A.

III. IDENTIFICATION OF UNDERTAKINGS AND THE AREA OF POTENTIAL EFFECTS

The RECDS shall determine if the activity it intends to permit, fund, or carry out constitutes an undertaking. If the RECDS determines that an activity is an undertaking, it shall establish the APE for each undertaking. The APE will be redefined, if needed, to include the entire historic structure, site, or object, when any portion of that structure, site, or object, is within an APE.

IV. PROGRAM ACTIVITIES AND INDIVIDUAL PROJECTS EXEMPT FROM SHPO OR COUNCIL REVIEW

A. For purposes of this PA, the RECDS has reviewed the current programs, projects, and activities in consultation with the SHPO and the parties have agreed that the undertakings and activities included in Appendix A of this PA will not be reviewed by the SHPO or Council pursuant to Section 106. RECDS will report such activities to the SHPO under the process outlined in Stipulation IX. of this PA. RECDS is not required to determine an APE for programs, projects, or activities listed in Appendix A.

B. If RECDS determines that a proposed undertaking is not exempt from review pursuant to Stipulation IV. A., it will request a records search from the appropriate Information Center of the California Historical Resources File System (Information Center) to identify historic properties that may be located in the APE. If the Information Center does not identify historic properties in the APE and: 1) does not recommend that RECDS perform an archeological survey; or 2) if RECDS performs the archeological survey recommended by the Information Center and does not identify properties that may be eligible for inclusion in the National Register, then RECDS may determine that no historic properties are located in the APE, document the finding, and proceed with the undertaking without review by the SHPPO or Council.

V. IDENTIFICATION AND EVALUATION OF HISTORIC PROPERTIES

A. If the Undertaking is not exempted from review pursuant to Stipulation IV. A. or RECDS determines that historic properties may be located in the APE pursuant to Stipulation IV. B., RECDS or the Applicant acting on RECDS' behalf shall consult with the appropriate Information Center and Interested Persons to identify historic properties within the APE. These identification efforts shall extend to all buildings, structures, objects, archeological sites, and sites that may have special importance to Native Americans or other Interested Persons and that appear to be fifty (50) or more years old. RECDS will assess the recommendations of the Information Center and conduct any surveys that RECDS determines necessary. RECDS will forward the information to the SHPO regarding the basis and results of the RECDS's identifications efforts with its determination of National Register eligibility pursuant to Stipulation V.B.

B. The RECDS shall evaluate each property identified pursuant to Stipulation V. A. by applying the National Register Criteria, 36 CFR 60.4, in consultation with the SHPO to each property within the APE. The RECDS shall notify the SHPO in writing of its determination regarding the National Register eligibility, and the SHPO shall, within thirty (30) days, notify the RECDS if it agrees or disagrees with its determination. The SHPO may request that the RECDS reevaluate a previously evaluated property if warranted by the passage of time or changing perceptions of significance.

C. If the RECDS and SHPO do not agree on the National Register eligibility of a property, or if the Council or the Secretary of the Interior request, the RECDS shall obtain a determination from the Secretary of the Interior pursuant to applicable National Park Service regulations.

VI. ASSESSMENT OF EFFECTS TO HISTORIC PROPERTIES

A. The RECDS shall apply the Criteria of Effect and Adverse Effect, in accordance with 36 CFR 800.9 to all Historic Properties located in the APE. This consultation with the SHPO should take place as early as possible in the planning stages of the undertaking, when the widest range of project alternatives is open for consideration. The RECDS will provide the SHPO with a full description of the undertaking and its possible effects to Historic Properties, including maps, photographs, drawings, archaeological site records and reports, and the views of the Applicant, affected local governments, Indian tribes, Federal agencies, interested persons, and the public as appropriate:

1. If the RECDS determines that an undertaking will have No Effect on historic properties, the RECDS will notify the SHPO in writing of this finding. If the SHPO does not object to the finding within fifteen (15) days, the undertaking may proceed without further review.

2. If the RECDS determines that an undertaking will not adversely affect a historic property or the undertaking meets one of the exceptions to the Criteria of Adverse Effect, 36 CFR 800.9(c), the RECDS will notify the SHPO of the finding. If the SHPO does not object to the finding within thirty (30) days, the undertaking may proceed without further review.

3. The RECDS shall consult further with the SHPO or Council, as appropriate, if: (a) any person requests that the Council review RECDS findings in accordance with 36 CFR 800.6(e); (b) the undertaking changes in ways that could affect historic properties; (c) previously undocumented historic properties are discovered during the implementation of the undertaking or if a known historic property will be affected in an unanticipated manner; (d) a historic property that was to be avoided has been inadvertently or otherwise affected; or (e) any condition of the undertaking; such as a delay in implementation or implementation in phases over time, may justify reconsideration of the current National Register status of historic properties within the APE.

4. If RECDS determines that the project will adversely effect a historic property, it will determine if the property will be treated according to the Standard Mitigation Measures set in Stipulation VII. or if the consultation process set out in 36 CFR 800.5(c) should be followed and will notify the SHPO in writing of its decision. The consultation process set out in 36 CFR 800.5(e) will be followed and RECDS will provide the Council with an adverse effect notice if:

a. RECDS determines not to implement the standard mitigation measures;
b. the SHPO withdraws from consultation;
c. the undertaking will adversely affect a National Historic Landmark;
d. the undertaking has known public opposition relating to historic properties;
e. the undertaking may affect a historic property containing human remains;
f. the SHPO objects in writing within thirty (30) calendar days after receipt of RECDS's notice that it will proceed with the Standard Mitigation Measures; or
g. the SHPO determines that the effects of an undertaking cannot be adequately addressed by the Standard Mitigation Measures set out below.

VII. STANDARD MITIGATION MEASURES

A. A Standard Mitigation Measures Agreement (SMMA) will be developed according to the following procedures:

1. RECDS, SHPO, the Applicant and other interested parties, if appropriate, shall consult to develop a written agreement that establishes the mitigation and recordation measures, such as but not limited to the salvage, storage, and reuse of any significant architectural features that may otherwise be demolished. The Council will not be a party to this agreement. The SMMA shall be signed by RECDS, SHPO, and other consulting parties, including the Applicant, to acknowledge that all specified measures shall be fulfilled as a condition of RECDS assistance. An SMMA shall include one or more of the following measures, modified as necessary, to consider the effects of the specific undertaking:

a. Recordation: RECDS shall ensure that the historic property is recorded prior to its demolition or alteration according to a Recordation Plan developed in consultation with the SHPO. At a minimum this plan will establish recordation methods and standards, and designate the appropriate archives for the deposit of this material. RECDS and the SHPO may mutually agree to waive the recordation requirement if the affected historic property will be rehabilitated in substantial, although not complete conformance with the Standards.

b. Curation: If the property will be demolished, RECDS, the SHPO, and the property owner will consult to determine if the property contains significant architectural features that could be reused or curated. If such features exist, RECDS, the SHPO, and the property owner will develop measures to ensure that the selected features are removed in a manner that minimizes damage and are delivered to an appropriate party for curation or reuse.

c. Data Recovery: If an archeological property will be affected by the undertaking, RECDS, the SHPO, and the property owner will consult to develop a data
recovery plan consistent with the Secretary of the Interior's Standards and Guidelines for Archeological Documentation (48 FR 44734-37) and take into account the Council's publication, "Treatment of Archeological Properties."

VIII. DISCOVERIES AND UNFORESEEN EFFECTS

A. The RECDS should plan for discoveries made during project implementation, particularly when an undertaking will take place within an area where buried archaeological deposits may be encountered. Such discovery plans shall be prepared in consultation with the SHPO and interested Native American groups and shall be submitted to the SHPO for review and approval prior to the commencement of the undertaking.

B. If the RECDS completes the review process established by this Programmatic Agreement and finds, after implementing the undertaking, that it will affect a previously unidentified property that may be eligible for inclusion in the National Register or will affect a known historic property in an unanticipated manner, the RECDS shall direct the Applicant to take all reasonable measures to avoid or minimize harm to the property until the RECDS concludes consultation with the SHPO. If the newly discovered property has not previously been included in or determined eligible for the National Register, the RECDS may assume that the property is eligible for purposes of this PA. The RECDS will notify the SHPO at the earliest possible time of the discovery and will coordinate with the Applicant to develop actions that will take the effects of the undertaking into account. The RECDS will notify the SHPO of any time constraints, and the RECDS and SHPO will mutually agree upon the timeframe for this consultation. The RECDS will provide the SHPO with written recommendations reflecting its consultation with the SHPO. If the SHPO does not object to the RECDS' recommendations within the agreed upon timeframe, the RECDS will ensure that the Applicant modifies the scope of work as necessary to implement the recommendations.

IX. REPORTING

A. The RECDS will notify the SHPO of its determinations made under Stipulation IV. A. and B. through its NEPA Finding of No Significant Impact (FONSI) public notification process, as required by RECDS' environmental procedures contained in FmHA Instruction 1940-G. If the SHPO does not notify RECDS within fifteen (15) days that it disagrees with the FONSI, RECDS may proceed with the undertaking.

B. The RECDS shall provide the SHPO and the Council with an initial biannual report on November 30, 1997 that summarizes the actions taken to implement the terms of this PA and recommends any action or revisions that should be considered during the next reporting period. The parties will review this information to determine if amendments to the PA are necessary. Subsequent reports will be developed by RECDS at the request of the Council.

X. PUBLIC INVOLVEMENT AND RESOLVING PUBLIC OBJECTIONS

A. The RECDS shall develop a public participation program in accordance with the guidance contained in the Council's publication, "Public Participation in Section 106 Review: A Guide for Agency Officials" (February 1989) to effectively notify and involve the public and interested persons in undertakings that may affect historic properties. The public participation program shall be incorporated into the RECDS' existing public involvement procedures. The RECDS shall consult with the Council and the SHPO to help develop this program, and will provide the Council and the SHPO with an opportunity to review and comment on the program.

B. At any time during the implementation of the measures contained in this PA should an objection to any such measure or the manner in which it is implemented be raised by a member of the public, the RECDS shall consult with the objecting party, the SHPO, and the Council, as to address the objection. If the objection pertains to the RECDS' decision to implement standard

mitigation measures pursuant to Stipulation VII. above, the RECDS shall terminate the abbreviated consultation process and initiate consultation with the SHPO and the Council pursuant to 36 CFR 800.5(e).

XI. DISPUTE RESOLUTION

Should the SHPO or the Council object within the timeframes provided by this PA to any plans, specifications, or other documentation provided for review pursuant to this PA, the RECDS shall consult with the SHPO or the Council to resolve the objection. If the RECDS determines that the objection cannot be resolved, the RECDS shall forward all documentation regarding the dispute to the Council. Within thirty (30) days of receipt of the documentation, the Council will either (1) provide the RECDS with recommendations which the RECDS will take into account in reaching a decision on the dispute, or (2) notify the RECDS that it will comment pursuant to 36 CFR 800.6(b), and proceed to comment. Any Council recommendation or comment will be understood to pertain only to the dispute, and the RECDS's responsibility to carry out all actions under this PA that are not the subject of the dispute will remain unchanged.

XII. ANTICIPATORY DEMOLITION

The RECDS agrees that it will not grant assistance to an Applicant who, with the intent to avoid the requirements of this PA or the National Historic Preservation Act, has intentionally significantly adversely affected a historic property to which the assistance would relate, or having legal power to prevent it, allowed such significant adverse effect to occur. The RECDS may, after consultation with the Council, determine that circumstances justify granting such assistance despite the adverse effect created or permitted by the Applicant.

XIII. IMPLEMENTATION AND TRAINING

The RECDS will notify all appropriate RECDS staff of the execution of this PA and develop management procedures to ensure that its terms are implemented. The SHPO and the Council may provide occasional basic historic preservation assistance to RECDS staff and representatives. This may include, but not be limited to, the implementation or this PA and the application of the Secretary of the Interior's Standards and Guidelines for Rehabilitation 36 CFR Part 67, and the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation.

XIV. MONITORING

The SHPO and the Council may monitor any activities carried out pursuant to this PA, and the Council will review such activities as requested. The RECDS will cooperate with the SHPO and the Council in carrying out these monitoring responsibilities.

XV AMENDMENTS

Any party to this PA may request it be amended, whereupon the parties will consult in accordance with 36 CFR 800.13 to consider such an amendment.

XVI. TERMINATION

Any party to this PA may terminate it by providing thirty (30) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the RECDS will comply with 36 CFR 800.4 through 800.6 with regard to individual undertakings covered by this PA.

XVII. FAILURE TO COMPLY WITH THIS AGREEMENT

In the event the RECDS does not carry out the terms of this PA, the RECDS will comply with 36 CFR 800.4 through 800.6 with regard to individual undertakings covered by this PA.

EXECUTION AND IMPLEMENTATION of this PA evidences that the RECDS has afforded the Council a reasonable opportunity to comment on the administration of its various programs and further evidences that the RECDS has satisfied its Section 106 responsibilities for all individual undertakings of the programs.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By:_____ date:_____
Robert D. Bush, Executive Director

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT SERVICES

By:_____ date:_____
Michael M. Reyna, State Director

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By:_____ date:_____
Cherilyn Widell, State Historic Preservation Officer

APPENDIX A
LIST OF ACTIVITIES EXCLUDED FROM THE INFORMATION CENTER AND SHPO REVIEW

A. GENERAL ACTIVITIES

1. Financial assistance which does not involve structures that appear to be fifty (50) or more years old; and
2. Financial assistance which will not result in changes in the use of land.

B. HOUSING ASSISTANCE

1. Financial assistance for the purchase of an existing single or multi-family dwelling;
2. Single or multi-family home construction in existing improved subdivisions that does not require additional ground disturbance;
3. RECDS' approval to build an individual structure on an improved lot within a previously built subdivision;
4. Self-help Technical Assistance Grants;
5. Technical Supervisory Assistance Loans and Grants; and
6. Weatherization of any housing unit that does not appear to be fifty (50) or more years old or otherwise eligible for inclusion in the National Register of Historic Places, either individually or as a contributing member of a historic district.

C. COMMUNITY AND BUSINESS PROGRAMS

1. New or replacement utilities within previously disturbed road right-of-way or utility corridors that do not involve extensive ground disturbance;
2. New or replacement water wells and related facilities, provided they do not involve extensive ground disturbance;
3. Modifications to existing water or wastewater treatment plants where the area is disturbed by previous construction, and do not involve extensive ground disturbance;
4. For business and community facility projects:
    a. Construction on sites where the ground has been extensively disturbed; or
    b. Construction that does not involve extensive ground disturbance on developed parcels or parcels located within developed industrial or commercial areas.
5. Water storage facilities that do not involve extensive ground disturbance.

STATE OF CALIFORNIA – THE NATURAL RESOURCES AGENCY
EDMUND G. BROWN, JR., *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
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April 05, 2017

Reply to: USDA_2017_0315_001

Pete Yribarren, Water Programs Director
Rural Development
U. S. Department of Agriculture
920 East Stowell Road
Santa Maria, California 93454

RE: Cayucos Sustainable Water Project (your letter of March 13, 2017)

Dear Mr. Yribarren:

Rural Development, United States Department of Agriculture (RD) is initiating its consultation with the Office of Historic Preservation (OHP) about the above cited undertaking, in accordance with Stipulation IV.B of the *Programmatic Agreement among the Rural Economic and Community Development Services, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding the implementation of the Rural Economic and Community Development Services Programs in California* (PA), executed on December 6, 1995.

The Cayucos Sanitary District (CSD) proposes to implement the Cayucos Sustainable Water Project (CSWP) by constructing a new Water Resource Recovery Facility (WRRF) on the south side of Toro Creek Road approximately 0.75 miles inland from State Route 1 in Cayucos. CWSP also includes infrastructure, pipelines and appurtenances for influent, effluent, recycled water and processed discharge water within the public rights-of-way including but not limited to Toro Creek Road, State Route 1, Ocean Boulevard, Main Street in Morro Bay, and Atascadero Road/State Route 41 in Morro Bay totaling 1.62 acres over approximately 14,113 linear feet of pipeline. The WRRF will encompass 8 acres of 2 parcels of land that encompass 221 acres. The area of potential effect (APE) for the above described components encompasses 9.62 acres.

As documentation for your finding of effect, you provided two cultural resources reports: (1) an archaeological investigation report prepared by Nancy Farrell and Esther Kenner (Cultural Resource Management Services) and dated December 2016, and (2) an interim report: summary of Phase 2 testing at CA-SLO-879/H prepared by Applied Earthworks, Inc. (Æ) and dated January 30, 2017. A records review that was conducted at the Central Coastal Information Center at UC-Santa Barbara. That records review identified that: (1) 168 previous cultural resources surveys had been conducted within a half mile radius of the APE, (2) 31cultural resources had been identified as being located within a half mile radius of the APE, and (3) CA-SLO-165 and CA-SLO-879/H had been identified as being located within or immediately adjacent to the APE. A pedestrian survey of the APE was conducted with no new cultural resources being identified.

CA-SLO-879/H was recorded in 1979 and described as a complex habitation site that has multiple loci comprised of marine shell, chert flaked tools and debitage, fire-affected rocks, shell bead, groundstones, bedrock milling feature, and human remains. The historic component consisted of

structures that were part of the former Chevron Estero Marine Terminal (a former oil tanker loading terminal originally constructed in 1929, inactive since 1999, and decommissioned in 2011) and a ranching and farming complex. This site is located across Toro Creek Road from the WRRF. RD considers this site to be eligible for listing on the National Register of Historic Places (NRHP), but it has never been evaluated formally.

CA-SLO-165 was recorded in 1960 and described as a large site consisting of shell midden covering a stabilized dune adjacent to Morro Creek and containing significant amounts of flaked and groundstones, battered cobbles, shell and vertebrate faunal remains, along with beads, pendants, shell fishhooks, charmstones, ochre, and asphaltum. An existing effluent pipeline (that will be replaced) traverses the western portion of this site in the vicinity of Main Street, State Route 1, and State Route 41. On November 15, 1993, OHP concurred with the Federal Highway Administration that CA-SLO-165 was eligible for listing on the NRHP (FHWA931019A).

Native American consultation included contacting the American Heritage Commission (NAHC) on April 20, 2016 and requesting a record search of their sacred land file. The NAHC responded that their search did not indicate the presence of Native American cultural resources in the APE. You sent request for comment letters to the eight Native American contacts provided by NAHC. In response to those letters:

- Northern Chumash Tribal Council stated it had a strong concern about the proposed development on land termed a sacred site'
- Mona Olivas Tucker, Chairwoman, yak tityu tityu – Northern Chumash Tribe, stated that the proposed project could result in considerable ground disturbing infrastructure and that the likelihood of encountering cultural resources was high, so archaeological investigations prior to permitting is needed; and
- Patti Dunton, Tribal Administrator, Salinan Tribe of Monterey and San Luis Obispo Counties, stated that the Tribe would (1) prefer an alternative site over the YRRF site because all of the already known cultural and burial sites along Toro Creek, (2) did not know of the same kind of resources at the alternative site, and (3) there could be cultural resources located at the alternative site, but the Tribe was not aware of any.

CSD has prepared a draft Environmental Impact Report (EIR) for this proposed undertaking (SCH no. 2016041078) and dated January 2017. In its EIR, CSD states that it responded to the tribal comments by meeting with representatives of the two Northern Chumash Tribes on June 29, 2016 in the field to discuss ways to avoid and reduce potential impacts to cultural resources from the proposed undertaking. In response to that meeting, CSD developed Cultural Mitigation Measures that are incorporated into the EIR and described below.

In response to Chairwoman Tucker's request for archaeological investigations, CSD contracted with Æ to perform Phase 2 testing of CA-SLO-879/H (at the site of WRRF and along Toro Creek Road). Between August 15 and September 6, 2016, Æ excavated 22 backhoe trenches, 53 shovel test pits, and 4 text excavation units. The testing at the site of WRRF found that no substantial subsurface cultural deposits are present and CSD concluded that the construction of the plant would not impact archaeological resources. From testing along Toro Creek Road, CSD determined that the road traverses CA-SLO-879/H for a distance of approximately 500 meters. Pipelines are proposed to be constructed along the north side of the road and Æ recommended that they be directionally drilled under the maximum depth of cultural deposits.

In its EIR, CSD has incorporated the following mitigation measures:

- Mitigation Measure CUL-1: To mitigate potential effects to tribal cultural resources, the CSD shall place portions of parcels 8 and 10 owned by the CSD between Toro Creek Road and Toro Creek in a conservation easement in favor of an appropriate entity to protect and manage the land for the type of historic agriculture uses that have occurred on the property, and preclude deep ripping agricultural activities such as used for vineyard installation. Additionally, the Cultural Resource Impact Assessment Report shall include a full technical analysis of all artifacts and other cultural remains collected during the Phase II study.
- Mitigation Measure CUL-2: To avoid any adverse effect on CA-SLO-879/H, the proposed pipelines along Toro Creek Road shall be placed only on the north side of the road and shall be directionally drilled under the maximum depth of cultural deposits. Three bore pits shall be installed along the pipeline alignment I previously disturbed areas, where cultural materials are sparse and lack integrity. The exact location of the bore pits and segment to be directionally drilled shall be dictated in the Final Cultural Resources Impact Assessment Report prepared for the project by Applied Earthworks. All work related to pipeline installation along Toro Creek Road shall be monitored by an archaeologist and Native American representatives. If at any point, the pipeline design requirements cannot be met, the project shall be halted and San Luis Obispo County and other responsible agencies contacted to determine the next course of action to protect historical or tribal cultural resources in compliance and Californian and federal law.
- Mitigation Measure CUL-3: To minimize potential impacts due to inadvertent discovery of cultural resources in site and pipeline areas with no evidence of resources, and consistent with LUO sections 22.05.140 and 23.10.040, the applicant shall prepare and implement a pre-construction Worker Education Program to train workers to recognize cultural resources and understand the procedures for stopping work and reporting the discovery.

For the replacement of the existing effluent pipeline that traverses a portion of CA-SLO-165, RD has concluded that no new ground disturbance would take place in this area, and this archaeological site would not be affected adversely by the project. CSD believes that the proposed replacement of the existing pipeline is consistent with Appendix A of the PA – List of Activities Excluded from the Information Center and SHPO review under C. Community and Business Programs:

1. New or replacement utilities within previously disturbed road right-of-way or utility corridors that do not involve extensive ground disturbance.

Based on the records review and the tribal consultation, RD has determined that a finding of No Historic Properties Affected is appropriate for this project. You have requested me to review and comment on your identification of the APE and your finding of No Historic Properties Affected for the project.

After reviewing the information submitted with your letter, I offer the following comments:

- I have no objections to your identification and delineation of the APE, pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d);
- I do not object to the use of archaeological and Native American monitors during this proposed undertaking;
- I believe that the proposed undertaking could have an effect on CA-SLO-879/H, but that effect will not be adverse;

- Because the proposed undertaking contains parts of CA-SLO-879/H and CA-SLO-165, I believe that a Finding of No Adverse Effect is more appropriate for this proposed undertaking; and
- I would not object to a Finding of No Adverse Effect for the proposed undertaking, as described above.

Be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have additional future responsibilities for this undertaking under 36 CFR Part 800. Should you encounter cultural artifacts during ground disturbing activities, please halt all work until a qualified archaeologist can be consulted on the nature and significance of such artifacts. This paragraph is consistent with Stipulation VIII.B of the PA regarding inadvertent discoveries.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact the following member of my staff: Tristan Tozer at (916) 445-7027 or via e-mail at Tristan.Tozer@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Appendix G Consultation with Native American Tribes

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX

April 20, 2016

Ron Rose
Cultural Resource Management Services

Sent by e-mail: ronrose@crms.com
Number of Pages: 3

RE: Proposed Cayucos Community Services District, Sustainable Wastewater Treatment Plant Project, Community of Cayucos, Cayucos and Morro Bay North USGS Quadrangles, San Luis Obispo County, California

Dear Mr. Rose:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

> Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
   - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and

- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

   - Any report that may contain site forms, site significance, and suggested mitigation measurers.

     All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the USGS quadrangle information provided with negative results.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

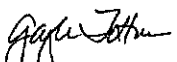
Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,



Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

CRMS
CULTURAL RESOURCE MANAGEMENT SERVICES

Cultural Resource Management Services
829 Paso Robles Street
Paso Robles, CA 93446
Phone 805-237-3838
Fax 805-237-3849

April 28. 2016

XXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXX

RE: Phase I Archaeological Inventory Survey, Cayucos Community Services District (CCSD)Alternate Sewer Locations Toro Creek Site 5, Old Creek/Montecito/Willow Creek Site 3

Dear XXXXXXXX:

The Cayucos Community Services District is proposing the construction of a new sustainable waste water treatment facility. From a multitude of candidate locations, they have now settled on one of two final candidate locations in or near Cayucos. One is on Old Creek/Montecito Road known as Location #3, and one on Toro Creek Road, and is identified as Location #5. In addition, for the final location, connecting pipelines, lift stations, percolation ponds, and other infrastructure in or near the identified area will be installed.

Cultural Resource Management Services (CRMS) has been retained by Firma Consultants, Inc., and the CCSD to conduct a Phase I surface investigation of the two locations together with other locations for the identified necessary infrastructure to complete the wastewater treatment system. In addition, CRMS has been charged with the preparation of a Native American early participation notice as well as advising interested Native Americans, tribes and groups of the project in accordance with AB52.

The location of the various aspects of the project are identified on the attached portions of the USGS 7.5' Quadrangle, Cayucos, and the USGS 7.5' Quadrangle, Morro Bay North. On those quadrangles, it is further identified as being in Range 10 East Township 28 and 29 South MDM. Since most of Cayucos and Morro Bay were part of a rancho, there are no section lines. The candidate sites are depicted as salmon colored polygons. The linear portion is shown by the heavy blue lines.

A search at the Native American Heritage Commission (NAHC) determined that there are no Sacred Lands or Sites within the area of Potential effect (APE). The mailing list for this letter was obtained from the NAHC, and the County of San Luis Obispo Department of Planning and Building. Please contact me as soon as possible if you or your organization have any information about the study area, including any knowledge of any possible Sacred Sites, or concerns about the anticipated project. You may phone me or write me at the numbers and address listed or email me at: ronrose@crms.com. Once again, if you wish to comment, respond as soon as possible.

Thanks for your help.

Best regards

Ron Rose
Vice President

Enclose: Portions of USGS 7.5' Quadrangle, Cayucos and Morro Bay North

The letter on the previous page was sent to the following Native Americans and groups. XXXX substituted for salutation and address.

Native American Heritage Commission
Tribal Consultation List
San Luis Obispo County
April 20, 2016

Santa Ynez Band of Mission Indians
Vincent Armenta, Chairperson
P.O. Box 517 Chumash
Santa Ynez , CA 93460
varmenta@santaynezchumash.org
(805) 688-7997
(805) 686-9578 Fax

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stennslie, Chair
365 North Poli Ave Chumash
Ojai , CA 93023
jtumamait@hotmail.com
(805) 646-6214

Salinan Tribe of Monterey, San Luis Obispo Counties
Patti Dunton, Tribal Administrator
7070 Morro Road, Suite A Salinan
Atascadero , CA 93422 Chumash
salinantribe@aol.com
(805) 464-2650
(805) 235-2730 Cell

Xolon-Salinan Tribe
Karen White, Council Chairperson
PO Box 7045 Salinan
Spreckels , CA 93962
blukat41@yahoo.com
831-238-1488

Coastal Band of the Chumash Nation
Mia Lopez, Chairperson
Chumash

cbcn.nahc.sb@gmail.com
(805) 324-0135

yak tityu tityu - Northern Chumash Tribe
Mona Olivas Tucker, Chairwoman
660 Camino Del Rey Chumash
Arroyo Grande , CA 93420
olivas.mona@gmail.com
(805) 489-1052 Home
(805) 748-2121 Cell

Northern Chumash Tribal Council
Fred Collins, Spokesperson
67 South Street Chumash
San Luis Obispo , CA 93401
fcollins@northernchumash.org
(805) 801-0347 (Cell)

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Cayucos Community Services District, Sustainable Wastewater Treatment Plant Project, Community of Cayucos, Cayucos and Morro Bay North USGS Quadrangles, San Luis Obispo County, California.

Chief Mark Steven Vigil
San Luis Obispo County Chumash Council
1030 Richie Road
Grover Beach, CA 93433

Response To Letters Written

Mona Tucker
Email June 11, 2016

Regarding the proposed Cayucos Sustainable Waste Water Treatment Facility: This will be a large project with considerable ground disturbing infrastructure. The likelihood of encounter cultural resources is high, so archaeological investigation prior to permitting is needed. The results of the testing has to be considered before any project goes forward.

Patti Dunton
Email June 16, 2016

From what I can tell, the Tribe would prefer the Old Creek site over the Toro Creek site because of all the already known cultural and burial sites along Toro Creek. We are unaware of these same kind of resources at the Old Creek site. There may be resources there, but we are unaware of any.

Even though there were only two responses to the early participation notice dated April 28, 2016, and subsequent efforts, little response to the initial contact does not imply no interest, since the tribes receive much similar correspondence monthly from private parties and state and federal agencies. Limited tribal resources and government protocol impact the response process. As the project planning continues, or-going efforts should be made to contact and work with the tribes, arranging face-to-face meetings. This on-going consultation relationship with the tribes may enhance information sharing, and benefit the project.

Appendix H Coastal Commission Response to Federal Consistency Determination

STATE OF CALIFORNIA—NATURAL RESOURCES AGENCY EDMUND G. BROWN, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200

February 13, 2017

Al Correale
Programs Specialist
United States Department of Agriculture
920 E. Stowell Rd.
Santa Maria, CA 93454

Applicant: **Cayucos Sanitary District**
Location: **Toro Creek Valley, Cayucos, San Luis Obispo Co.**
Project: **Cayucos Sustainable Water Project**

The Coastal Commission staff has received your request to identify Commission jurisdiction for the purposes of processing an application for federal funding from the U.S. Dept. of Agriculture (USDA). Pursuant to the federal Coastal Zone Management Act (CZMA) and the associated implementing regulations, USDA cannot grant the subject funds to the Cayucos Sanitary District until the District has complied with the requirements of Section 307(d) of the CZMA (16 USC § 1456[d]) and the associated regulations (15 CFR Part 930, Subpart F). The District can meet these requirements by receiving a Commission concurrence with either (1) a consistency certification prepared by the applicant; or (2) a showing that the activity does not affect the coastal zone; or (3) a showing that regulatory processes are in place that will enable ultimate determinations, prior to construction, that the project is consistent with the Coastal Act.

The Coastal Commission declines to assert federal consistency jurisdiction at this time, due to the fact that: (1) the project involves federal funding for a project located partially within the coastal zone; (2) those project components within the coastal zone will need to receive one or more coastal development permits issued by the County of San Luis Obispo; (3) such permit(s) would be appealable to the Commission because the project will likely need an Army Corps of Engineers permit and because it would be a major public works facility; (4) the project does not present any fundamental conflicts with Coastal Act policies at this time; and (5) if the Commission ultimately has any concerns over effects on coastal resources, it will have the opportunity to resolve those concerns through the permit/appeals review processes.

Sincerely,

MARK DELAPLAINE
Manager, Energy, Ocean Resources,
and Federal Consistency Division

cc: Central Coast District

Appendix I State Clearinghouse Notification of Federal Funding Application (Form 424)

Transmission Report

Date/Time	03-02-2017	04:37:09 p.m.	Transmit Header Text	
al ID 1	18059953673		Local Name 1	Cayucos Sanitary District

This document : Confirmed
(reduced sample and details below)
Document size : 8.5"x11"

CAYUCOS SANITARY DISTRICT

March 2, 2017

California State Clearinghouse All Counties
1400 10th Street
Sacramento, Ca. 95814
Via fax (916) 323-3018

Subject: **Application for Federal Assistance SF-424**

This application is being made available to the State under executive order **#12372.**

Sincerely,

Rick Koon
District Manager
Cayucos Sanitary District

Number of pages: 2
(including cover sheet)

Mailing Address:
P.O. Box 333
Cayucos, Ca 93430

Office:
200 Ash Avenue
Cayucos, Ca 93430

Phone:
(805) 995-3290
Fax:

Total Pages Scanned : 2 Total Pages Confirmed : 2

No.	Job	Remote Station	Start Time	Duration	Pages	Line	Mode	Job Type	Results
001	005	916 323 3018	04:36:24 p.m. 03-02-2017	00:00:18	2/2	1	EC	HS	CP28800

Abbreviations:

HS: Host send	PL: Polled local	MP: Mailbox print	CP: Completed	TS: Terminated by system
HR: Host receive	PR: Polled remote	RP: Report	FA: Fail	G3: Group 3
WS: Waiting send	MS: Mailbox save	FF: Fax Forward	TU: Terminated by user	EC: Error Correct

CAYUCOS SANITARY DISTRICT

March 2, 2017

California State Clearinghouse All Counties
1400 10th Street
Sacramento, Ca. 95814
Via fax (916) 323-3018

Subject: **Application for Federal Assistance SF-424**

This application is being made available to the State under executive order **#12372**.

Sincerely,

Rick Koon

Rick Koon
District Manager
Cayucos Sanitary District

Number of pages: 2
(including cover sheet)

Mailing Address:
P.O. Box 333
Cayucos, Ca 93430

Office:
200 Ash Avenue
Cayucos, Ca 93430

Phone:
(805) 995-3290
Fax:
(805) 995-3673

OMB Number: 4040-0004
Expiration Date: 10/31/2019

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 03/02/2017

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Cayucos Sanitary District

* b. Employer/Taxpayer Identification Number (EIN/TIN): 95-257-1848

* c. Organizational DUNS: 1943875100000

d. Address:

* Street1: 200 Ash Ave
Street2:
* City: Cayucos
County/Parish:
* State: CA: California
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 93430-1003

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name: Rick

Middle Name:

* Last Name: Koon

Suffix:

Title: District Manager

Organizational Affiliation:

* Telephone Number: 805-995-3290

Fax Number: 805-995-3673

* Email: rkoon@cayucossd.org

Appendix J USFWS Biological Opinion

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
08EVEN00-2017-F-0295

March 29, 2017

Pete Yribarren, Water Programs Director
U.S. Department of Agriculture, Rural Development
920 E. Stowell Road
Santa Maria, California 93454

Subject: Biological Opinion on the U.S. Department of Agriculture Rural Development Grant Funding for the Cayucos Sustainable Water Project, Cayucos Sanitary District, San Luis Obispo County, California

Dear Mr. Yribarren:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion based on our review of the proposed action and its effects on the federally threatened California red-legged frog (*Rana draytonii*) and its critical habitat in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). We received the U.S. Department of Agriculture's (USDA) request for formal consultation via electronic transmission on March 10, 2017. Included with your request was a report entitled "Cayucos Sustainable Water Project Environmental Report" (MIG 2017). Previously received was a biological assessment (BA) prepared by Althouse and Meade (2016).

Also included in your correspondence was a request for our concurrence that the proposed action is not likely to adversely affect the federally endangered tidewater goby (*Eucyclobobius newberryi*) or its critical habitat. This species has been documented to occur in the lower reaches of Toro Creek within critical habitat unit SLO-8. The majority of the project is located in upland habitat and separated, for the most part, from Toro Creek by Toro Creek Road. Adverse effects to tidewater goby or its critical habitat that could result from construction activities would be a decrease in water quality from suspended sediment or contaminants. These effects would be avoided by the inclusion of measures specifically directed towards the protection of adjacent and downstream water quality (i.e., minimization measures 1 to 8 and 13). Based upon our review of these measures and information in our files, we concur that the proposed action is not likely to adversely affect the tidewater goby or its critical habitat. Neither will be discussed further in this document.

We note that the proposed project area provides habitat for the federally threatened south-central California coast steelhead (*Onchorhyncus mykiss*) and is within critical habitat designated for this species. It is our understanding that you will be consulting separately with the National

Marine Fisheries Service on this species and its critical habitat. As such, south-central California coast steelhead and its critical habitat are not addressed in this document.

We based our biological opinion regarding California red-legged frog and its critical habitat on the materials provided in your request, the BA, phone conversations between you and staff biologist Julie M. Vanderwier, and information contained in our files. We can make a record of this consultation available at the Ventura Fish and Wildlife Office.

Consultation History

On January 24, 2017, we received a request from the USDA for concurrence with the determination that construction activities associated with the proposed action may affect, but are not likely to adversely affect, the federally endangered tidewater goby and its critical habitat or the federally threatened California red-legged frog and its critical habitat. We responded in a letter dated March 9, 2017, with our concurrence for tidewater goby and its critical habitat; however, were not able to concur with your determination for the California red-legged frog and its critical habitat. Ms. Vanderwier discussed the proposed action and potential adverse effects to California red-legged frogs with you on March 7, 2017. As an outcome of this conversation, the USDA revised its determination regarding California red-legged frog and requested to initiate formal consultation on March 10, 2017.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed action involves the construction of a water resource recovery facility (WRRF) along Toro Creek Road, in the Toro Creek Valley, approximately 0.75 mile inland from State Route 1 in an unincorporated area of San Luis Obispo County just south of the city of Cayucos. The Cayucos Sanitation District (CSD) is seeking funding from USDA Rural Development under their Water and Waste Disposal Loan and Grant Program in order to construct a new Water Resource Recovery Facility (WRRF) and related conveyance infrastructure.

Construction would result in the disturbance of 9.62 acres on two parcels legally described as County of San Luis Obispo Assessor's Parcel Numbers 073-092-034 and 073-092-050 and includes the WRRF footprint (8 acres) and associated infrastructure (1.62 acres). The WRRF would include water treatment process infrastructure as well as supporting facilities including offices, a potable water system, laboratory, generator building, fencing, solar panels, spill prevention structures, a spill containment basin, and landscape screening. The collection and conveyance infrastructure will consist of pipelines to convey influent, treated wastewater, and effluent and will be placed within public rights-of-way including, but not limited to, Toro Creek Road, State Route 1, and Ocean Boulevard in Cayucos and Main Street and the intersection of Atascadero Road State Highway 41 in Morro Bay.

Construction laydown areas for the WRRF will be located on the east side of Toro Creek Road, within the area that will ultimately support the solar arrays as depicted on Figure 1-4 of the Environmental Report. The arrays will be installed after the staging area is no longer needed. Construction will not impact the existing agricultural ditch that flows across the site. Equipment used for the conveyance pipelines will be staged on paved road areas or along road shoulders. In addition to Toro Creek, conveyance infrastructure will cross three other creeks: Old Creek, Willow Creek, and Alva Paul Creek. In all cases, pipelines will be hung from an existing bridge inside pipe conduit mounted on concrete abutments on each side of the creek outside the top of bank of the channel. The conduit will be installed using crane equipment and no work will be done within the creeks.

The duration of construction activities for the WRRF and associated conveyance infrastructure is estimated to be 18 months. It should be noted that the proposed action analyzed in this consultation is restricted to only construction activities. Effects to federally listed species that may result as part of WRRF operation and maintenance in the future are not included.

The following measures are included in the project description and will be implemented with the intent of minimizing adverse effects to the California red-legged frog and its critical habitat and avoiding adverse effects to tidewater goby and its critical habitat:

1. Best management practices (BMPs) will be used at the WRRF site to prevent any sediment from entering Toro Creek. A storm water pollution prevention plan (SWPPP) will be prepared and implemented by qualified personnel. Long-term measures identified in the SWPPP will include revegetation activities, installation of basins and/or bioswales, and infiltration areas as needed. A spill containment basin will capture, slow, and percolate post-construction storm water runoff on the site. Storm water runoff upstream of the development site will flow to this basin via an existing agricultural ditch. This containment basin will also function as a storm water treatment facility to remove sediments and other materials from the storm water before it flows west and enters Toro Creek.

2. Check valves will be installed on all influent and treated water pipelines near Toro Creek to reduce the risk of spill into the creek to also minimize sediment flow.

3. During construction of the WRRF, a 300-foot setback from top of bank of Toro Creek will be established to avoid or minimize sediment flow into the creek.

4. During construction of the conveyance pipelines across Toro Creek, no ground-disturbing activities will take place within the riparian corridor or within the top of the bank channel.

5. The outer edge of riparian vegetation along Toro Creek will be shown on construction plans and boundaries of the work area clearly delineated. Grading limits will also be clearly delineated in the field prior to the initiation of construction activities.

6. The contractor will follow an approved spill prevention plan, which will include procedures to ensure that all equipment is free of leaks and properly maintained.

7. Hazardous materials will be properly stored in secured areas located outside of the Toro Creek riparian corridor.

8. Mobile equipment will be staged, repaired, and maintained at least 300 feet from the top of the bank of Toro Creek or on existing paved-road surfaces. Fueling will be conducted only in pre-designated areas also at least 300 feet from top of bank or on existing paved-road surfaces. Spill containment material will be placed around equipment before refueling activities are conducted. Standing equipment will be outfitted with drip pans and hydrocarbon absorbent pads.

9. Vegetation removal and ground-disturbing activities will be avoided during the wet season.

10. Pre-construction surveys for California red-legged frog will be conducted by a Service-approved biologist prior to any vegetation clearing or ground disturbing activities.

11. Prior to the start of vegetation clearing or construction activities, an exclusionary silt fence will be installed to reduce the likelihood of California red-legged frogs entering the project area during construction. This fencing will be checked daily by a Service-approved biologist to ensure its integrity and move any observed individuals present along the fence line out of harm's way into suitable habitat.

12. The Service-approved biologist will document compliance with all project BMPs and other environmental compliance measures. Prior to the start of each work day, a Service-approved biologist will survey the work areas for California red-legged frogs, inclusive of looking under parks vehicles and equipment. If individuals are found, they will be moved by this biologist out of harm's way into the nearest suitable habitat.

13. Service-approved biologists will develop and deliver environmental awareness briefings to all project personnel prior to their participation in project activities. The briefing will include, at a minimum, a description of project activities and the listed species that may occur within or adjacent to the work areas as well as the general and specific measures to be followed in order to protect these species during all aspects of project implementation.

14. All trash will be removed from the site daily or secured in a predator-resistant container to avoid attracting predators to the work areas.

ANALYTICAL FRAMEWORK FOR THE JEOPARDY AND ADVERSE MODIFICATION DETERMINATIONS

Jeopardy Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of listed species. "Jeopardize the continued existence of" means "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species" (50 CFR 402.02).

The jeopardy analysis in this biological opinion relies on four components: (1) the Status of the Species, which describes the rangewide condition of the California red-legged frog, the factors responsible for that condition, and its survival and recovery needs; (2) the Environmental Baseline, which analyzes the condition of the California red-legged frog in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the California red-legged frog; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the California red-legged frog; and (4) the Cumulative Effects, which evaluates the effects of future, non-Federal activities, that are reasonably certain to occur in the action area, on the California red-legged frog.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the current status of the California red-legged frog, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the California red-legged frog in the wild by reducing the reproduction, numbers, and distribution of that species.

Adverse Modification Determination

Section 7(a)(2) of the Act requires that Federal agencies ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of designated critical habitat. A final rule revising the definition of "destruction or adverse modification of critical habitat" was published on February 11, 2016 (81 FR 7214). The revised definition states: "Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for the conservation of a listed species. Such alterations may include, but are not limited to, those that alter the physical or biological features essential to the conservation of a species or that preclude or significantly delay development of such features."

The revised "destruction or adverse modification" definition focuses on how Federal actions affect the quantity and quality of the physical or biological features (PBFs)[1] in the designated critical habitat for a listed species and, especially in the case of unoccupied habitat, on any impacts to the critical habitat itself. Specifically, the Service will generally conclude that a Federal action is likely to "destroy or adversely modify" designated critical habitat if the action results in an alteration of the quantity or quality of the essential physical or biological features of designated critical habitat, or that precludes or significantly delays the capacity of that habitat to develop those features over time, and if the effect of the alteration is to appreciably diminish the value of critical habitat for the conservation of the species.

The Service may consider other kinds of impacts to designated critical habitat. For example, some areas that are currently in a degraded condition may have been designated as critical habitat for their potential to develop or improve and eventually provide the needed ecological functions to support species' recovery. Under these circumstances, the Service generally concludes that an action is likely to "destroy or adversely modify" the designated critical habitat if the action alters it to prevent it from improving over time relative to its pre-action condition. The "destruction or adverse modification" definition applies to all PBFs; as described in the proposed revision to the current definition of "physical or biological features" (50 CFR 424.12), "[f]eatures may include habitat characteristics that support ephemeral or dynamic habitat conditions" (79 FR 27066).

The adverse modification analysis in this biological opinion relies on four components: (1) the Status of Critical Habitat, which describes the rangewide condition of designated critical habitat for the California red-legged frog in terms of the essential physical and biological features, the factors responsible for that condition, and the intended recovery function of the critical habitat overall; (2) the Environmental Baseline, which analyzes the condition of the critical habitat in the action area, the factors responsible for that condition, and the recovery role of the critical habitat in the action area; (3) the Effects of the Action, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated and interdependent activities on the PCEs and how that will influence the recovery role of the affected critical habitat units; and (4) Cumulative Effects, which evaluates the effects of future non-Federal activities, that are reasonably certain to occur in the action area, on the PCEs and how that will influence the recovery role of affected critical habitat units.

For purposes of the adverse modification determination, the effects of the proposed Federal action on the critical habitat of the California red-legged frog are evaluated in the context of the rangewide condition of the critical habitat, taking into account any cumulative effects, to determine if the critical habitat rangewide would remain functional (or would retain the current ability for the PCEs to be functionally established in areas of currently unsuitable but capable habitat) to serve its intended recovery role for the California red-legged frog.

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[1] The critical habitat rule for California red-legged frog uses the term "primary constituent elements" (PCEs) to describe the "physical and biological features" (PBFs) as used in the revised definition of "destruction or adverse modification of critical habitat." For this biological opinion, PCEs and PBFs are considered synonymous.

STATUS OF THE SPECIES AND ITS CRITICAL HABITAT

The California red-legged frog was federally listed as threatened on May 23, 1996 (Service 1996). Revised critical habitat was designated on March 17, 2010 (Service 2010). A recovery plan was completed for the species in 2002 (Service 2002).

Detailed information on the biology of California red-legged frogs can be found in Storer (1925), Stebbins (2003), and Jennings et al. (1992). It is the largest native frog in the western United States, ranging from 1.5 to 5.1 inches in length. California red-legged frogs spend most of their lives in and near sheltered backwaters of ponds, marshes, springs, streams, and reservoirs. Deep pools with dense stands of overhanging willows and an intermixed fringe of cattails (*Typha latifolia*) are considered optimal habitat. Eggs, larvae, juveniles, and adults also have been found in ephemeral creeks and drainages and in ponds that do not have riparian vegetation. Accessibility to sheltering habitat is essential for the survival of California red-legged frogs within a watershed, and can be a factor limiting population numbers and distribution. Some California red-legged frogs have moved long distances over land between water sources during winter rains. Adult California red-legged frogs have been documented to move more than 2 miles in northern Santa Cruz County "without apparent regard to topography, vegetation type, or riparian corridors" (Bulger et al. 2003). Most of these overland movements occur at night.

California red-legged frogs breed from November through April with earlier breeding records occurring in southern localities. California red-legged frogs are often prolific breeders, typically laying their eggs during or shortly after large rainfall events in late winter and early spring. Female California red-legged frogs deposit egg masses on emergent vegetation so that the masses float on the surface of the water. Egg masses contain about 2,000 to 5,000 moderate-sized (0.08 to 0.11 inch in diameter) dark reddish brown eggs. Embryos hatch 6 to 14 days after fertilization and larvae require 3.5 to 7 months to attain metamorphosis. Tadpoles probably experience the highest mortality rates of all life stages, with less than 1 percent of eggs laid reaching metamorphosis. Sexual maturity normally is reached at 3 to 4 years of age; California red-legged frogs may live 8 to10 years. Juveniles have been observed to be active diurnally and nocturnally, whereas adults are mainly nocturnal.

The diet of California red-legged frogs is highly variable. Invertebrates are the most common food items for adults, although vertebrates such as Pacific tree frogs (*Pseudacris regilla*) and California mice (*Peromyscus californicus*) can constitute over half of the prey mass eaten by larger frogs (Hayes and Tennant 1985).

The California red-legged frog has been extirpated or nearly extirpated from 70 percent of its former range. Historically, this species was found throughout the Central Valley and Sierra Nevada foothills. At present, California red-legged frogs are known to occur in 243 streams or drainages in 22 counties, primarily in central coastal California. The most secure aggregations of California red-legged frogs are found in aquatic sites that support substantial riparian and aquatic vegetation and lack non-native predators. Over-harvesting, habitat loss, non-native species

introduction, and urban encroachment are the primary factors that have negatively affected the California red-legged frog throughout its range (Jennings and Hayes 1985, Hayes and Jennings 1988). Ongoing causes of decline include direct habitat loss due to stream alteration and disturbance to wetland areas, indirect effects of expanding urbanization, and competition or predation from non-native species.

Although the presence of California red-legged frogs is correlated with still water deeper than approximately 1.6 feet, riparian shrubbery, and emergent vegetation (Jennings and Hayes 1985), numerous locations in the species' historical range exist where these elements are well represented yet California red-legged frogs appear to be absent. The cause of local extirpations does not appear to be restricted solely to loss of aquatic habitat. The most likely causes of local extirpation are thought to be changes in faunal composition of aquatic ecosystems (e.g., the introduction of non-native predators and competitors) and landscape-scale disturbances that disrupt California red-legged frog population processes, such as dispersal and colonization. The introduction of contaminants or changes in water temperature may also play a role in local extirpations. These changes may also promote the spread of predators, competitors, parasites, and diseases.

Recovery Plan for the California Red-legged Frog

The final recovery plan for the California red-legged frog (Service 2002) states that the goal of recovery efforts is to reduce threats and improve the population status of the California red-legged frog sufficiently to warrant delisting. This species will be considered for delisting when:

1. Suitable habitats within all core areas are protected and/or managed for California red-legged frogs in perpetuity, and the ecological integrity of these areas is not threatened by adverse anthropogenic habitat modification (including indirect effects of upstream/downstream land uses);

2. Existing populations, throughout the range, are stable (i.e., reproductive rates allow for long-term viability without human intervention). Population status will be documented through establishment and implementation of a scientifically acceptable population monitoring program for at least a 15-year period, which is approximately 4 to 5 generations of the California red-legged frog. This 15-year period will preferably include an average precipitation cycle. An average precipitation cycle is a period when annual rainfall includes average to 35 percent above-average through greater than 35 percent below-average and back to average or greater. The direction of change is unimportant in this criterion; Populations are geographically distributed in a manner that allows for the continued existence of viable metapopulations despite fluctuations in the status of individual populations (i.e., when populations are stable or increasing at each core area);

3. The species is successfully reestablished in portions of its historic range such that at least one reestablished population is stable/increasing at each core area where California red-legged frog are currently absent; and

4. The amount of additional habitat needed for population connectivity, recolonization, and dispersal has been determined, protected, and managed for California red-legged frogs.

The recovery plan describes a strategy for delisting, which includes the following actions: (1) protect known populations and reestablish populations; (2) protection of suitable habitat, corridors, and core areas; (3) development and implementation of management plans for preserved habitat, occupied watersheds, and core areas; (4) development of land use guidelines; (5) collection of biological and ecological data necessary for conservation of the species; (6) monitoring of existing populations and surveys for new populations; and (7) establishment of an outreach program.

ENVIRONMENTAL BASELINE

Action Area

The implementing regulations for section 7(a)(2) of the Act define the "action area" as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the proposed action (50 FR 402.02). For the purposes of this biological opinion, we consider the action area to include that area for the WRRF and its attendant solar array depicted on Figure 5 of the BA.

Habitat Characteristics of the Action Area

The project site is bounded on the west by Toro Creek Road. Toro Creek and its riparian habitat lie approximately 350 feet to the west of Toro Creek Road. The majority of the project site is disturbed land. Active agricultural fields comprise a large portion of the project area and are contiguous with ruderal vegetation dominated by nonnative annual grasses and forbs. The agricultural fields are bisected by a man-made ditch that conveys storm flows from an existing natural drainage on the slope above and off-site towards Toro Creek. There is no riparian habitat in this anthropogenic feature, which likely holds water only during heavy rain events.

Status of the Species in the Action Area

California red-legged frogs are known to occur in the Toro Creek watershed from a record in the California Natural Diversity Database (occurrence 895); however, no protocol-level or otherwise species-specific surveys were conducted for California red-legged frog for this project. Sections of Toro Creek near its confluence with the agricultural ditch flows and around the first Toro Creek Road bridge were visually inspected for an unspecified period in October 2015. Creek banks and pools were looked at as part of these visual inspections. No individuals of any life stage were observed.

Recovery

The proposed project occurs within the Central Coast for the California red-legged frog located along the coastal portions of California between San Francisco and Santa Barbara County. This recovery unit supports the greatest number of drainages currently occupied by the California red-legged frog. In San Luis Obispo County, California red-legged frogs are found in many streams, stock ponds, dune ponds, and springs on the coastal plain and western slopes of the Santa Lucia Range from San Carpoforo Creek in the north to the Santa Maria River in the south. California red-legged frogs occur in 30 streams in San Luis Obispo County alone. Existing threats in this unit include habitat conversion to agriculture, competition from non-native species, livestock presence in riparian areas, mining activities, timber harvest, urbanization, and water management (including diversions and reservoirs) (Service 2002).

There are six core areas within the Central Coast Recovery Unit. The project site is within the Estero Bay Core Area, which is considered to be occupied and contain source populations. The primary conservation needs for the California red-legged frog discussed for the Estero Bay Core Area are protection of existing populations and protection of habitat connectivity, control of non-native predators, and reduction of water diversions to ensure adequate flows (Service 2002).

Status of Critical Habitat in the Action Area

The action area is within critical habitat unit SLO-3, which is a large unit of approximately 116,517 acres (47,153 hectares) near the coast in central San Luis Obispo County. It extends from just north of the City of Morro Bay south to just north and east of the City of San Luis Obispo. The unit is currently occupied and contains permanent and ephemeral aquatic habitat for breeding and non-breeding activities and upland habitat for foraging, dispersal, and shelter. This critical habitat unit provides connectivity within the Santa Lucia Range and between this range and the inner Coast Range in San Luis Obispo County. Physical and biological features essential to the conservation of California red-legged frog in the SLO-3 unit are present within the action area and include (1) space for individual and population growth and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; and, potentially, (4) sites for breeding, reproduction, or rearing (or development) of offspring.

EFFECTS OF THE ACTION

Even with the inclusion of minimization measures, some individuals present in the action area could be adversely affected by project activities. These effects are described below.

There will be no activities within Toro Creek; however, movement of equipment and people in the vicinity of the creek could inadvertently crush and injure or kill dispersing California red-legged frogs. In addition, ground disturbance such as grading could also crush and injure or kill these individuals. The USDA and CSD have committed to retain qualified biologists to search

for, capture, and move out of harm's way any California red-legged frogs identified within the action area. This will reduce the chances of injury or mortality due to the movement of machinery or foot traffic, but it is unlikely to eliminate it for those individuals that evade detection.

While the capture and moving California red-legged frogs out of harm's way will reduce injury or mortality from equipment, foot traffic, or ground disturbance, injury or mortality of individuals may occur as a result of improper handling, containment, transport of individuals or from releasing them into unsuitable habitat (e.g., where exotic predators are present), or unavoidable stress to the individual. California red-legged frogs are known to quickly return to the point of capture and certain individuals may be subject to multiple captures, desiccation, and increased predation while attempting to return. Observations of diseased and parasite-infected amphibians are frequently reported. This has given rise to concerns that releasing amphibians following a period of captivity, during which time they can be exposed to infections or disease, may cause an increased risk of mortality in wild populations. Amphibian pathogens and parasites can also be carried between habitats on the hands, footwear, or equipment of fieldworkers, which can spread them to localities containing species that have had little or no prior contact with such pathogens or parasites. The commitment on the part of the USDA and CSD to ensure that only qualified biologists capture and move individuals is intended to prevent improper handling, containment, or transport of California red-legged frogs.

Handling California red-legged frogs during capture activities may also result in the spread of chytrid fungus, a pathogen linked to declines in amphibians. Chytrid fungus is a water-borne fungus that can be spread through direct contact between aquatic animals and by a spore that can move short distances through the water. The fungus can decimate amphibian populations, causing fungal dermatitis, which usually results in death in 1 to 2 weeks. Infected animals may spread the fungal spores to other ponds and streams before they die. If California red-legged frogs that are captured and moved are infected with chytrid fungus, they may spread the fungal spores to uninfected individuals in the relocation area.

Accidental spills of hazardous materials or careless fueling or oiling of vehicles or equipment could degrade water quality or upland habitat to a degree where California red-legged frogs are injured or killed. The potential for this effect to occur is reduced by the inclusion of minimization measures that include worker education, locating staging and fueling areas away from riparian areas or other water bodies, and having an effective spill response plan in place onsite.

Uninformed workers could disturb, injure, or kill California red-legged frogs. The potential for this effect to occur would be reduced by the USDA's and CSD's proposal to have a Service-approved biologist provide an environmental briefing to inform workers of the potential presence and protected status of California red-legged frogs and those measures required to protect individuals during project activities. Trash left during or after project activities could attract predators to work sites, which could, in turn, prey on California red-legged frogs. The USDA

and CSD have included a measure to contain and remove all trash that may attract predators from the worksite, thereby reducing the chance of attracting predators.

Effects on Critical Habitat

The proposed action would result in the permanent loss of approximately 8 acres of California red-legged frog critical habitat in unit SLO-3. This acreage is more than 300 feet from Toro Creek and upland habitat subject to current and past agricultural activities. As such, it does not contain those primary constituent elements identified in the final rule designating critical habitat for this species (Service 2010). As such, the proposed action would not result in adverse modification to critical habitat for California red-legged frogs.

Effects on Recovery

As previously stated, the recovery status of the California red-legged frog is considered within the scale of the recovery unit as opposed to its overall range. Because of the varied status of this species and differing levels of threats throughout its range, recovery strategies differ by recovery unit to best meet the goal of delisting the species. The goal of the recovery plan is to protect the long-term viability of all extant populations within each recovery unit. Overall, the strategy for the recovery of the California red-legged frog involves: (1) protecting existing populations by reducing threats, (2) restoring and creating habitat that would be protected and managed in perpetuity, (3) surveying and monitoring populations and conducting research on the biology and threats to the species, and (4) reestablishing populations of the species within its historical range (Service 2002).

We do not expect the proposed project to negatively affect the integrity of the Estero Bay Core Area of the Central Coast Recovery Unit for the following reasons: (1) the area would continue to be occupied by the species, if present; (2) the core area could continue to function as a source population, and (3) the project area would continue to provide connectivity to other areas suitable for or occupied by California red-legged frogs. As noted above, the action area consists of upland habitat subject to current and past agricultural activities. Surrounding upland habitat will continue to exist such that the function of the core area for recovery of California red-legged frogs would not be compromised.

Summary of Effects

In summary, the proposed project would result in the loss of a small area of upland habitat that may be used for dispersal of California red-leggeds. Few, if any, California red-legged frogs are likely to be injured or killed because the USDA and CSD will implement a suite of minimization measures as part of the project, including capturing and moving out of harm's way all California red-legged frogs from the action area prior to the onset of the site preparation, vegetation removal, and construction activities. As such, the proposed action should not impede the recovery of the California red-legged frog.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. We do not consider future Federal actions that are unrelated to the proposed action in this section because they require separate consultation pursuant to section 7 of the Act. We are unaware of any other non-Federal actions that are reasonably certain to occur in the action area that are likely to adversely affect the California red-legged frog or its designated critical habitat.

CONCLUSION

The regulatory definition of "to jeopardize the continued existence of the species" focuses on assessing the effects of the proposed action on the reproduction, numbers, and distribution, and their effect on the survival and recovery of the species being considered in the biological opinion. For that reason, we have used those aspects of the California red-legged frog's status as the basis to assess the overall effect of the proposed action on the species. After reviewing the current status of the species and critical habitat, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's biological opinion that the USDA's proposed action is not likely to jeopardize the continued existence of California red-legged frog, nor destroy or adversely modify its critical habitat.

We have reached these conclusions based on the following reasons:

1. The USDA and CSD have proposed measures to minimize potential adverse effects of the proposed action on the California red-legged frog;

2. Critical habitat will not be adversely affected by the proposed action nor will the value and function of the Estero Bay Core Area of the Central Coast Recovery Unit be reduced or compromised;

3. The project area is small and project implementation is of a short duration;

4. Work activities would occur only in upland habitat and the USDA has proposed to conduct vegetation clearing and ground-disturbing activities during the dry season to reduce the likelihood of encountering dispersing California red-legged frogs; and

5. Due to the inclusion of monitoring activities to identify California red-legged frogs within the project area such that they may be captured and moved out of harm's way, few individuals are likely to be killed or injured as a result of the proposed action.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened wildlife species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not the purpose of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be undertaken by the USDA and made binding conditions of the grant issued to the CSD for the exemption in section 7(o)(2) to apply. The USDA has a continuing duty to regulate the activity covered by this incidental take statement. If the USDA (1) fails to assume and implement the terms and conditions or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the USDA, as informed by the CSD, must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR 402.14(i)(3)].

We anticipate that take of California red-legged frogs will result as a result of the proposed action. The minimization measures proposed by the USDA and CSD are expected to substantially reduce take in the form of injury or mortality of individuals by monitoring for, capturing, and moving identified individuals out of harm's way. As such, we expect the incidental take will be almost entirely in the form of capture. It is not possible for us to quantify the precise number of California red-legged frogs that may be taken as a result of the proposed action because California red-legged frogs are quite mobile and can move quickly over relatively short periods of time. Captured individuals can move back into their original habitat after being moved or individuals may move into the action area between the time pre-construction surveys are conducted and construction actually begins. Moved individuals may travel from where they were placed out of harm's way and die or, being unfamiliar with the new location, be subject to increased predation. Due to the frog's cryptic nature, density of vegetation within its habitat, and relatively small size, California red-legged frogs may escape detection. Location of a dead or injured California red-legged frog can be difficult, again due to their cryptic nature.

Although we are unable to reasonably anticipate the actual number of California red-legged frogs that would be taken in the form of harm, harass, injury or mortality by the proposed action, we

must provide a level at which consultation would have to be reinitiated. The Environmental Baseline and Effects Analysis sections of this biological opinion indicate that adverse effects to the species would likely be low given the nature of the proposed activities and we, therefore, anticipate that take of California red-legged frogs would also be low. We also recognize that for every California red-legged frog found dead or injured, other individuals injured or killed may go undetected. For this reason when we determine an appropriate take level, we anticipate that the actual take could be higher and we set the number below that level.

Similarly, for estimating the number of California red-legged frogs that would be taken by capture, we cannot predict how many may be encountered. While we believe that the benefits of capture and moving of individuals out of harm's way (to minimize injury or mortality) outweigh the risk of capture, we must provide a limit for take by capture at which consultation would be reinitiated because high rates of capture may indicate that some important information about the species in the action area was not apparent (e.g., it is much more abundant than thought) and considered in the effects analysis. Conversely, because capture and moving can be highly variable, depending upon the species and the timing of the activity, we do not anticipate a number so low that reinitiation would be triggered before the effects of the activity were greater than what we determined in the Effects Analysis.

Therefore, if 2 adult or juvenile California red-legged frogs are found in an injured state or dead or 10 individuals of either adults or juveniles are captured and moved, the USDA must contact our office to reinitiate formal consultation. Project activities likely to cause additional take should cease during this review period because the exemption provided under section 7(o)(2) would lapse and any additional take would not be exempt from the section 9 prohibitions.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize the incidental take of California red-legged frogs:

1. Only Service-approved biologists will conduct activities associated with California red-legged frogs, including preparation and presentation of environmental briefings, monitoring surveys, and capture/moving of adults and/or juvenile frogs;

2. Effects to California red-legged frogs related to project activities, including the capture and moving of individuals, must be minimized.

TERMS AND CONDITIONS

To be exempt from the prohibitions of section 9 of the Act, the USDA and CSD must comply with the following terms and conditions, which implement the reasonable and prudent measures described above, and outline reporting and monitoring requirements. These terms and conditions are non-discretionary.

1. The following term and condition implements reasonable and prudent measure 1:

   Only demonstrably qualified biologists may conduct monitoring surveys for and capture/move California red-legged frogs as part of the proposed action. The USDA or its designated agent must request our approval of any biologists they wish to employ to conduct these activities in writing at least 15 working days prior to the commencement of any such activities. Possession of a section 10(a)(1)(A) permit cannot substitute for this approval.

2. The following terms and conditions implement reasonable and prudent measure 2:

   a) Prior to the onset of any project-related activities, the Service-approved biologists must identify appropriate receptor sites for California red-legged frog adults and juveniles captured as part of monitoring surveys. These areas must be in proximity to the capture site, contain suitable habitat, not be affected by project activities, and be free of exotic predatory species (e.g., bullfrogs, crayfish) to the best of the approved biologists' knowledge. When capturing and removing any life stage of California red-legged frogs from work sites, the Service-approved biologist(s) must minimize the amount of time that animals are held in captivity. While in captivity, the captured animals must be maintained in a manner that does not expose them to temperatures or any other environmental conditions that could cause injury or undue stress. Service-approved biologists will capture animals by hand or dip net, and will transport individuals in buckets separate from any other species.

   b) If a California red-legged frog in any life stage is discovered in the work area as part of monitoring surveys and is at risk from project-related activities, work must be suspended on that particular phase of the project until the individual voluntarily leaves the area or the approved biologist is available to capture and move it out of harm's way.

   c) Those biologists who handle California red-legged frogs must ensure that their activities do not transmit diseases and/or pathogens. To ensure that diseases and/or pathogens are not conveyed between work sites, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force must be followed at all times. A copy of the code of practice is included (see attachment) with this biological opinion. A bleach solution (0.5 to 1.0 cup of bleach to 1.0 gallon of water) may be substituted for the ethanol solution if needed. Care must be taken to ensure all traces of the disinfectant are removed from all equipment and apparel before entering the next aquatic habitat.

   d) The approved biologist must visit the site on at least a weekly basis throughout the duration of the project or whenever activities have the potential to adversely affect California red-legged frogs to ensure that all the protective measures proposed by the USDA and CSD (and included in the project description and the terms and conditions of this biological opinion) are being employed. The biologist(s) must be onsite during the initial ground disturbing activities, including initial vegetation clearance, removal of

illegal fill and structures, and whenever construction equipment or personnel are working within the action area. The biologist, in full coordination with the applicant and his contractors, must be a liaison between resource agencies and the construction contractor regarding compliance with these requirements. If the applicant or his contractors are not in compliance with these requirements, the biologist must contact the USDA immediately and the USDA must suspend work on that particular phase of the proposed project until such time that the applicant and his contractors are again in full compliance.

e) Any excavation or equipment/materials storage areas that could entrap California red-legged frogs must be covered each night and during any periods of time when active construction is not occurring and checked prior to use before the start of any work day in order to reduce the chance of injury or mortality that could result from confining individuals in these features.

REPORTING REQUIREMENTS

The USDA must provide a written final report to the Service's Ventura Fish and Wildlife Office (2493 Portola Road, Suite B; Ventura, California 93003) within 90 days following completion of the proposed project. The report must describe all activities that were conducted under the auspices of this biological opinion, including activities that were described in the proposed action and required under the terms and conditions. It must also contain a brief discussion of any problems encountered in implementing minimization measures, the results of surveys and monitoring, and any other pertinent information. The report must document the relocation site for California red-legged frogs, if such was needed during the project, and the number of California red-legged frogs that were taken during project activities. Finally, the report must contain a brief discussion of any problems encountered in implementing minimization measures or terms and conditions and any other pertinent information.

DISPOSITION OF DEAD OR INJURED SPECIMENS

As part of this incidental take statement and pursuant to 50 CFR 402.14(i)(1)(v), upon locating a dead or injured California red-legged frog, initial notification within 3 working days of its finding must be made by telephone and in writing to the Ventura Fish and Wildlife Office (805-644-1766). The report must include the date, time, location of the carcass, a photograph, cause of death or injury, if known, and any other pertinent information.

The USDA or its designated agent must take care in handling injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. They must transport injured animals to a qualified veterinarian. Should any treated California red-legged frogs survive, the USDA or its designated agent must contact the Service regarding the final disposition of the animal(s). The remains of any California red-legged frog must be placed with educational or research institutions holding the appropriate State and Federal permits, such as the Santa Barbara Natural History Museum (Contact: Paul Collins,

Santa Barbara Natural History Museum, Vertebrate Zoology Department, 2559 Puesta Del Sol, Santa Barbara, California 93460, 805-682-4711, extension 321).

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. We recommend that the USDA:

- contribute to its section 7(a)(1) obligations by working to incorporate recovery actions for California red-legged frogs identified in the recovery plan into future actions it permits or provides funding for;

- investigate the presence, distribution, and effects of parasites and disease, such as *Batrachochytrium dendrobatidis* (chytrid fungus), in Toro Creek and the upper portion of its watershed; and

- investigate the efficacy of capture/ moving of California red-legged frogs to determine if use of this minimization measure does reduce adverse effects of project actions on the species with a focus on repeat capture and behavior of individuals post-movement.

The Service requests notification of the implementation of any conservation recommendations so we may be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats.

REINITIATION NOTICE

This concludes formal consultation with the USDA's proposed action to grant funding to the CSD for the construction of a WRRF along Toro Creek Road near Cayucos, San Luis Obispo County, California. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the exemption issued pursuant to section 7(o)(2) will have lapsed and any further take would be a violation of section 4(d) or 9. Consequently, we recommend that any operations causing such take cease pending reinitiation.

If you have any questions regarding this biological opinion, please contact Julie Vanderwier of my staff at (805) 644-1766 extension 53400, or by electronic mail at julie_vanderwier@fws.gov.

Sincerely,

Stephen P. Henry
Field Supervisor

Attachment

LITERATURE CITED

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The Declining Amphibian Populations Task Force Fieldwork Code of Practice

1. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires, and all other surfaces. Rinse cleaned items with sterilized (e.g., boiled or treated) water before leaving each work site.

2. Boots, nets, traps, and other types of equipment used in the aquatic environment should then be scrubbed with 70 percent ethanol solution and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond. wetland, or riparian area.

3. In remote locations, clean all equipment with 70 percent ethanol or a bleach solution, and rinse with sterile water upon return to the lab or "base camp" Elsewhere, when washing-machine facilities are available, remove nets from poles and wash in a protective mesh laundry bag with bleach on the "delicates" cycle.

4. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolated species, wear disposable vinyl2 gloves and change them between handling each animal. Dedicate sets of nets, boots, traps, and other equipment to each site being visited. Clean them as directed above and store separately at the end of each field day.

5. When amphibians are collected, ensure that animals from different sites are kept separately and take great care to avoid indirect contact (e.g., via handling, reuse of containers) between them or with other captive animals. Isolation from unsterilized plants or soils which have been taken from other sites is also essential. Always use disinfected and disposable husbandry equipment.

6. Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.

7. Used cleaning materials and fluids should be disposed of safely and, if necessary, taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

The Fieldwork Code of Practice has been produced by the Declining Amphibian Populations Task Force with valuable assistance from Begona Arano, Andrew Cunningham, Tom Langton, Jamie Reaser, and Stan Sessions.

For further information on this Code, or on the Declining Amphibian Populations Task Force, contact John Wilkinson, Biology Department, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK.
E-mail: DAPTF@open.ac.uk

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2 Do not use latex gloves as latex is toxic to amphibians.

Appendix K NMFS Concurrence Letter

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

March 31, 2017

Refer to NMFS No:
WCR-2017-6642

Pete Yribarren
Water Programs Director
USDA Rural Development
920 East Stowell Road
Santa Maria, CA 93454

Re: Endangered Species Act Section 7(a)(2) Concurrence for the Cayucos Sustainable Water Project, San Luis Obispo County, California

Dear Mr. Yribarren:

On January 26, 2017, NOAA's National Marine Fisheries Service (NMFS) received the United States Department of Agriculture (USDA) Rural Development's January 23, 2017, letter requesting initiation of informal consultation, pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended. The USDA plans to fund the Cayucos Sustainable Water Project (Project) near Toro Creek (proposed action) in Cayucos, San Luis Obispo County, California. The proposed action is of concern to NMFS because Toro Creek is within the range of the threatened South-Central California Coast (S-CCC) Distinct Population Segment of steelhead (*Oncorhynchus mykiss*) and is designated critical habitat for the species.

This response to your request was prepared by NMFS pursuant to section 7(a)(2) of the ESA, implementing regulations at 50 CFR part 402, and agency guidance for preparation of letters of concurrence. This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Public Consultation Tracking System [https://pcts.nmfs.noaa.gov/pcts-web/homepage.pcts]. A complete record of this consultation is on file at the California Coastal Office's Southern California Branch in Long Beach.

Proposed Action and Action Area

The proposed action includes construction and operation of a Water Resource Recovery Facility (WRRF) and wastewater conveyance infrastructure. Construction will take a maximum of two years with a project lifespan of over 40 years. Specifically, the WRRF site alone will be 8 acres, and will include water-treatment-process infrastructure as well as supporting offices, potable water system, laboratory, generator building, fences, solar panels, spill-prevention structures, a spill-containment basin, and landscape screening. The collection and conveyance infrastructure (1.62 acres) will consist of new pipelines adjacent to the existing vehicle bridge crossing over Toro Creek; pipelines will convey influent, wastewater, and tertiary-treated effluent.

No direct or indirect discharge generated by the WRRF will enter Toro Creek because all discharge will exit an existing, permitted outfall in Estero Bay (California Regional Water Quality Control Board (CRWQCB), Central Coast Region Order # R3-2008-0065, NPDES No. CA0047881). The anticipated design capacity for daily-flow discharge will be in the range of 0.30 to 0.40 million gallons per day. The WRRF design includes tertiary-treatment technology of chlorine disinfection to avoid violations in daily-maximum limitations for chlorine. Additionally, the Modified Ludzack-Ettinger process will be coupled with a membrane bioreactor to reduce nutrients such as nitrogen and phosphorus in discharged effluent.

The proposed action also includes measures to prevent excess sediment from entering Toro Creek during both construction and operation of the Project. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented. SWPPP long-term measures will include revegetation, basins, bioswales and infiltration areas. A spill-containment basin is designed to capture and percolate increased post-construction stormwater runoff on site. During operation, the basin will function to remove sediments and other deleterious materials before the stormwater flows through an existing vegetated agricultural ditch that connects with Toro Creek. There is no interrelated or interdependent activity associated with the proposed action.

The action area has a collective footprint of 9.62 acres including one mile of lower Toro Creek. These acres are roughly a half mile inland from State Route 1 in an unincorporated area of San Luis Obispo County between Morro Bay and Cayucos. Ground-disturbing activities due to the proposed action will be 300-ft distant from Toro Creek while one-time, minimal vegetation trimming will occur at the Toro Creek bridge crossing during construction of new pipelines. The action area includes Estero Bay because the Project requires treated wastewater discharge into the bay at the outfall approximately 880 meters offshore from Atascadero State Beach (also known as Morro Strand State Beach).

Action Agency's Effects Determination

The USDA determined the proposed action is not likely to adversely affect threatened S-CCC steelhead (71 FR 5248) based on the methods, including the precautionary measures, that are proposed to complete construction and operation of the WRRF and associated conveyance infrastructure (pipelines). Successful implementation is expected for water-quality control measures and erosion-control Best Management Practices (BMPs) to avoid impacting designated critical habitat (70 FR 52488), thus the USDA does not anticipate adverse modification of designated critical habitat. On March 15, 2017, the USDA determined that the proposed action would not affect essential fish habitat (EFH) within Estero Bay and, consequently, the USDA did not submit an EFH consultation request to NMFS.

Consultation History

The USDA's consultation package includes a Biological Assessment (December 2016) for the proposed action. NMFS determined the USDA's January 23, 2017, consultation package was complete upon receipt, thus informal consultation was initiated on January 26, 2017. On February 6, 2017, the USDA clarified the Project construction timeframe as well as the lifespan of the Project. On February 15, 2017, the USDA further clarified aspects of Project operations related to proposed techniques that will minimize effects of stormwater runoff into Toro Creek.

On February 22, 2017, the USDA provided the draft Environmental Impact Report (EIR) (2017) for the Project.

Effects of the Action

Under the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

Having carefully reviewed the proposed action, NMFS determined the following regarding the expected effects:

- During construction of the conveyance pipeline, there will be no ground-disturbing activities within the Toro Creek channel, its riparian corridor or within the top of the channel bank. Canopy trimming at the Toro Creek bridge can result in reduced shade over the creek, however, the extent and degree of the proposed trimming is not expected to meaningfully alter the physical or biological features of the riparian canopy. For this reason, decreased shade will be insignificant to water temperature within Toro Creek. Further, during construction of the WRRF, there will be a 300-ft setback from Toro Creek to minimize the likelihood of sedimentation, thus direct adverse effects to steelhead or physical and biological features of designated critical habitat are discountable.

- Adverse effects from construction-induced alterations in water quality, for example, elevated turbidity and reduced dissolved oxygen, will be insignificant to steelhead and designated critical habitat because the proposed stormwater-retention basin is expected to preclude pollutants from entering Toro Creek.

- Although the WRRF is designed to accept the anticipated winter and spring peak-storm flows, the proposed action also includes an emergency containment basin as well as conveyance-pipe check valves to reduce the risk of untreated wastewater reaching Toro Creek in the event there is an accidental release of untreated wastewater. Thus, adverse effects to steelhead or their habitat from an accidental release are discountable.

- Considering the ongoing operation of the proposed action, accelerated streambank erosion and increased sedimentation levels are expected to be insignificant at the confluence of the agricultural ditch and Toro Creek. The proposed drainage plan involves a combination of bioswales and infiltration areas that will capture, infiltrate, and remediate stormwater runoff generated from the WRRF. In turn, this drainage plan is expected to increase infiltration and slow the rate of stormwater runoff when combined with a stormwater-retention basin.

- Adverse effects to steelhead in Estero Bay are expected to be insignificant based on water-quality requirements for the Project. Effluent is not expected to cause dissolved oxygen concentration to reach harmful levels or to be depressed more than 10 percent from that which occurs naturally in the action area. The proposed two-step process is expected to efficiently remove excess nitrogen and phosphorus to achieve constituent levels comparable to background levels observed in Estero Bay. Effluent is expected to be diluted through outfall diffusers, resulting in no measurable increase in total suspended solids or measurable decrease in natural light within the water column. Lastly, effluent temperature is expected to within ambient temperatures, thus no measurable change to steelhead physiology or behavior is anticipated.

Conclusion

Based on this analysis, NMFS concurs with the USDA that the proposed action is not likely to adversely affect the subject listed species and designated critical habitat.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by the USDA or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16).

Please direct a question regarding this letter to Brittany Struck at 562-432-3905 (Brittany.Struck@noaa.gov), Southern California Branch of the California Coastal Area Office.

Sincerely,

for Barry A. Thom
Regional Administrator

cc: Al Correale, USDA
Roger Root, USFWS, Ventura
Linda Connolly, CDFW, San Luis Obispo
Katie DeSimone, CRWQCB
Administrative File: 151422WCR2017CC00025