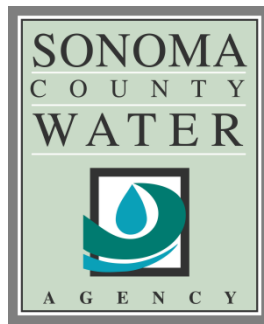


INITIAL STUDY AND NEGATIVE DECLARATION

Occidental County Sanitation District to
Airport-Larkfield-Wikiup Sanitation Zone
Wastewater Transport Project

Lead Agency:
SONOMA COUNTY WATER AGENCY
404 Aviation Boulevard
Santa Rosa, CA 95403



Contact:
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POSTING AND REVIEW PERIOD:
September 29, 2017 to October 30, 2017

SCH# 2017052078

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INTRODUCTION

The Sonoma County Water Agency (Water Agency), has prepared this Initial Study and Negative Declaration of Environmental Impact (IS/ND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Occidental County Sanitation District (District) to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project).

The Water Agency was created in 1949 by the California Legislature as a special district to provide flood protection and water supply services. The members of the Sonoma County Board of Supervisors are the Water Agency's Board of Directors. The Water Agency's powers and duties authorized by the California Legislature include the production and supply of surface water and groundwater for beneficial uses, control of flood waters, generation of electricity, provision of recreational facilities (in connection with the Water Agency's facilities), and the treatment and disposal of wastewater.

The Water Agency operates several sanitation districts in Sonoma County, including the District.

Purpose of Initial Study

This IS/ND was prepared pursuant to the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code Sections 21000 et. seq.), the State CEQA Guidelines (Code of Regulations, Title 14, Division 6, Chapter 3), and the Water Agency's Procedures for the Implementation of CEQA.

The Water Agency's Board of Directors, as the lead agency under CEQA, will consider the potential environmental impacts of the Proposed Project when it considers whether to approve the Proposed Project. This IS/ND is an informational document to be used in the decision-making process. After completion of the public review period for this document, this IS/ND, along with a summary of comments submitted and the Water Agency's response to those comments, will be brought before the Water Agency's Board of Directors for their consideration.

The IS/ND describes the Proposed Project and its environmental setting, including the project site's existing conditions and applicable regulatory requirements. This IS/ND also evaluates potential environmental impacts from the Proposed Project to the following resources:

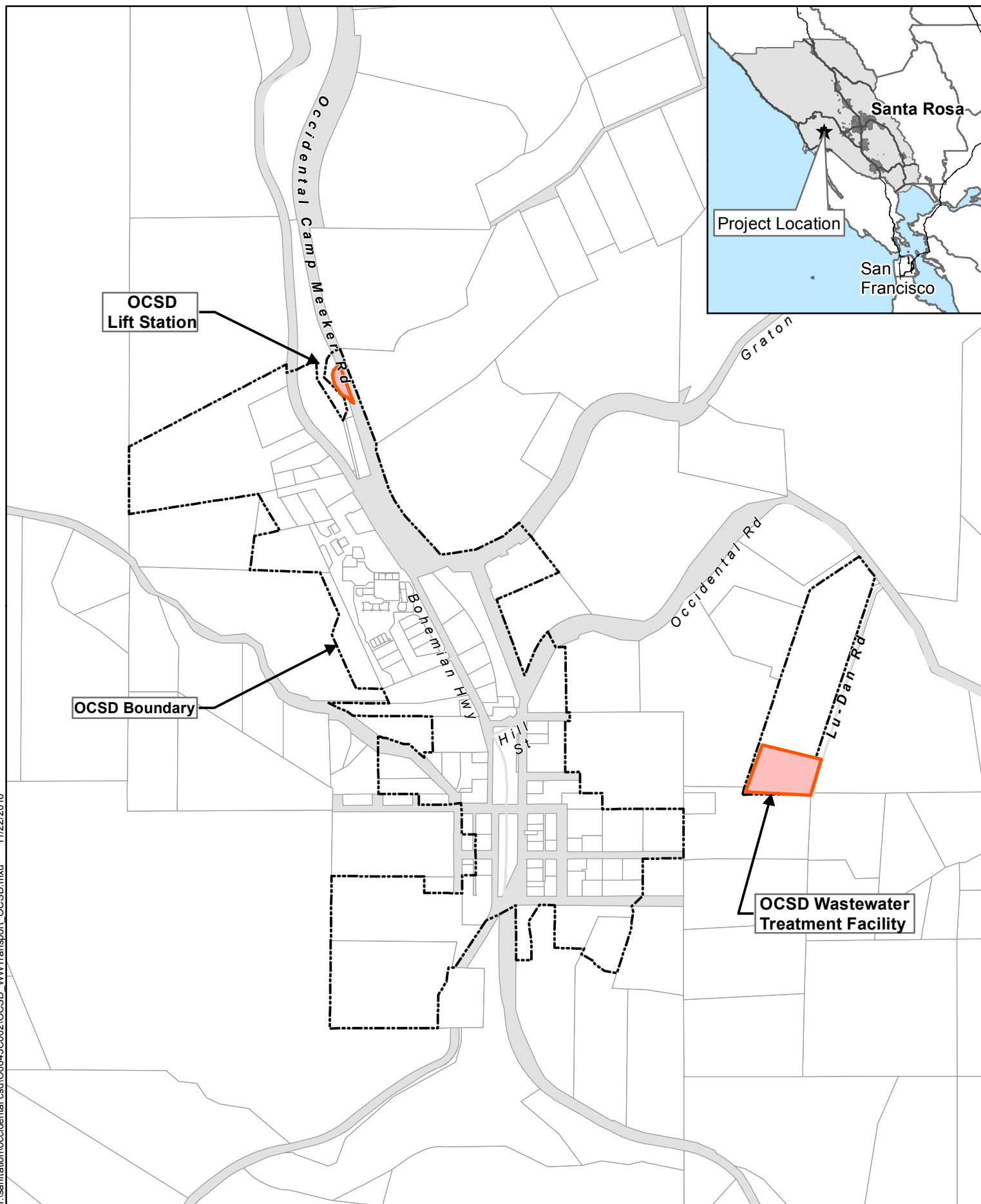
- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public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

The Proposed Project incorporates measures to ensure there would be no significant adverse impacts on the environment.

LOCATION

The Proposed Project would be located within the Occidental County Sanitation District (District) service area, and would utilize existing sanitation facilities in the Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ), which is also operated by the Water Agency. The District serves approximately 118 parcels in the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). Wastewater transportation would primarily occur between the District Lift Station located on Occidental-Camp Meeker Road in Occidental (Figure 1), and the ALWSZ wastewater treatment facility (WWTF), located approximately 18 miles from the District, on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would also occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 1). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF.

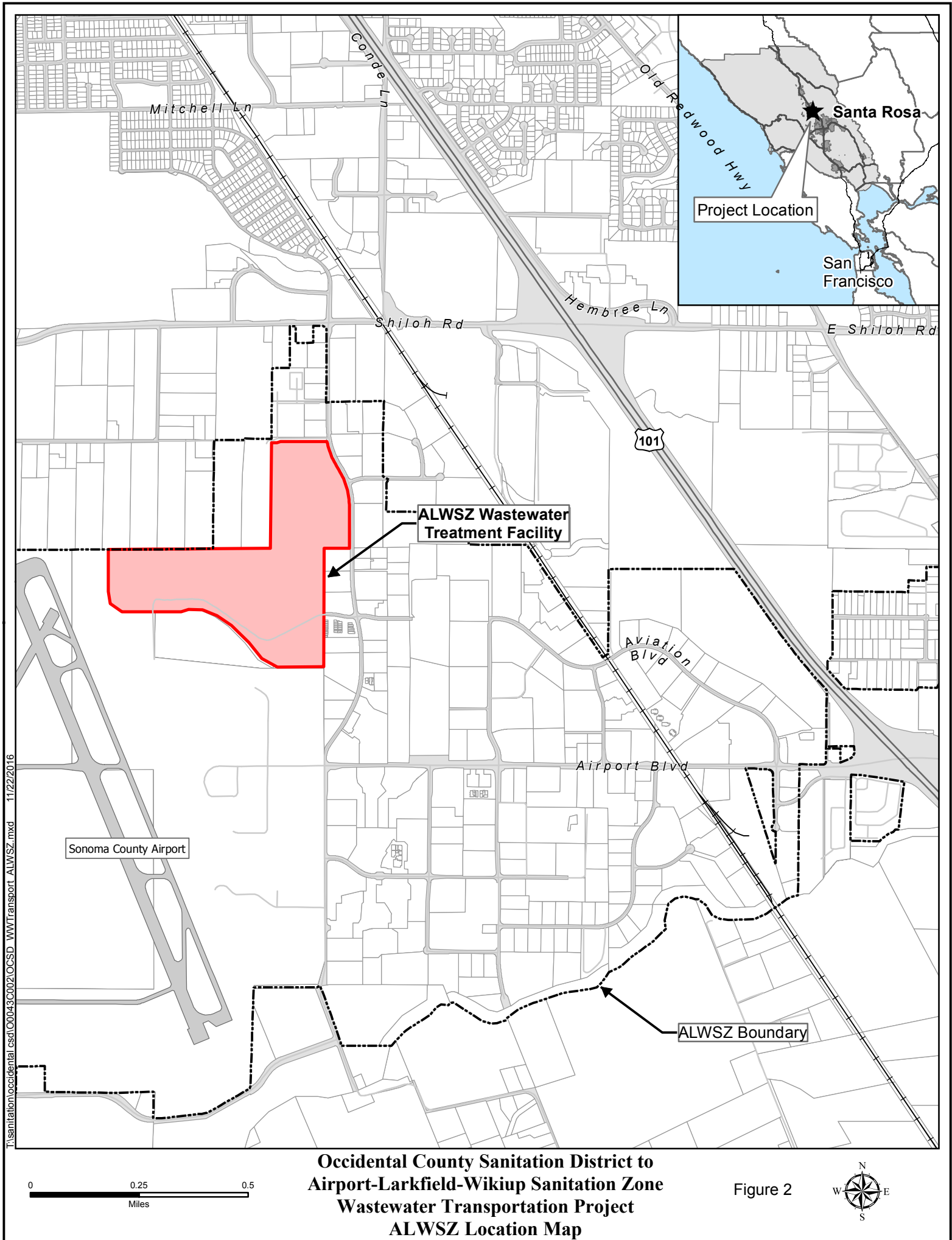
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**Occidental County Sanitation District
Wastewater Transport Project
OCSD Location Map**

Figure 1





PROJECT PURPOSE AND NEED

The District has utilized Graham's Pond, located on private property at 5502 Graton Road, near Occidental, as a year-round secondary-treated effluent storage reservoir since 1977. However, North Coast Regional Water Quality Control Board (Regional Board) analysis has determined that Graham's Pond is a water of the United States due to its construction and location at the headwaters of Dutch Bill Creek. The pond was originally constructed as an agricultural pond.

The District's WWTF is permitted by the Regional Board under the Waste Discharge Requirements (WDRs) adopted in Order No. R1-2012-0101 (Order), dated December 6, 2012. This Order replaces the previous WDR Order No. 93-42 that was adopted on May 27, 1993. Order No. R1-2012-0101 serves as the District's current National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023051. The five-year term of the WDRs began February 1, 2013. The Order implements provisions of the North Coast Regional Board Water Quality Control Plan (Basin Plan), whereby no WWTF is allowed to discharge waste to the Russian River or its tributaries during the period of May 15 through September 30. Since Graham's Pond is considered a water of the United States subject to NPDES permit requirements and a tributary to the Russian River, it is not permissible to discharge secondary-treated effluent into the pond from May 15 through September 30. However, because Graham's Pond is the only storage pond currently available to the District, it is not possible for the District to meet this requirement of Order No. R1-2012-0101, and the District continues to discharge secondary-treated effluent into the pond year-round.

As a result of threatened or continued discharge violations of the District's operating Order, the Regional Board adopted Cease and Desist Order (CDO) No. R1-2012-0102 on December 6, 2012, which included provisions of the Basin Plan that would require advanced (tertiary-level) wastewater treatment for the District's discharges to surface waters. In order to remedy the problem of discharging secondary-treated effluent to Graham's Pond in the summer and Dutch Bill Creek in the winter, the Regional Board has provided a schedule to allow the District time to develop a project to bring the District into compliance with the CDO. The time schedule requires the District to complete a capital improvement project and achieve full compliance with all applicable WDRs by January 31, 2018.

The District is currently pursuing compliance with requirements identified in Order No. R1-2012-0101 and CDO. No. R1-2012-0102 to cease the discharge of secondary-treated effluent into Dutch Bill Creek and the use of the existing on-stream storage reservoir at Graham's Pond through implementation of the Proposed Project by transferring the treatment, storage, and disposal of untreated wastewater to the ALWSZ WWTF.

The Proposed Project is intended to address issues identified by CDO No. R1-2012-0102 and bring the District into compliance with its operating Order. The Proposed Project would transfer treatment, storage, and disposal of the District's wastewater to the ALWSZ WWTF. These actions would improve the wastewater treatment level from secondary-treatment at the District facilities to a tertiary-treatment level at the ALWSZ facilities and would meet storage, irrigation, and discharge requirements established by the Regional Board. The ALWSZ currently utilizes irrigation of agricultural lands for disposal of tertiary-treated recycled water with no discharges to surface waters.

PROJECT BACKGROUND

The community of Occidental is located in western unincorporated Sonoma County, California (Figure 1). The community is in a rural area surrounded by hilly terrain. Occidental serves as a town center for the surrounding areas. There are approximately 45 dwelling units, approximately 30 business and commercial establishments, and two churches in the town. Several restaurants are the primary base of the town's economy. According to the United States (U.S.) Census Bureau, Occidental is a Census Designated Place (CDP) with a 2010 population of 1,115.¹ The CDP includes the northerly community of Camp Meeker and the southerly community of Freestone so the actual population of Occidental is considerably less. Based on the 2011-2015 American Community Survey 5-year estimates, the mean household income within the CDP is \$136,034 and median household income is \$71,295 (California Department of Finance, 2016)².

Occidental has a potable water system and a wastewater collection and treatment system. The potable water system is operated by the Occidental Community Services District (Services District). The Services District implemented water conservation measures in Occidental and reduced potable water demands by approximately 20 percent between 2010 and 2012. Wastewater service is provided by the Occidental County Sanitation District. The Water Agency operates and manages the WWTF under contract with the District. The District treats wastewater generated from approximately 283 Equivalent Single Family Dwelling Units (ESDs) to a secondary-level. One ESD is generally equivalent to a single family home, whereas ESDs for restaurants and other businesses are calculated using a standard formula. The Occidental community currently generates approximately 17,000 gallons per day (gpd) of wastewater under dry weather flow conditions.

The District has worked toward solving its wastewater challenges since the late 1990s. On August 29, 1997, the Regional Board issued CDO No. 97-74 against the District for violation of the WDRs set forth in Order No. 93-42. The CDO cited violations in the discharge quality of effluent as well as violations of the time limits for discharges to Dutch Bill Creek. CDO No. 97-74 set forth a schedule for implementation of short-term solutions

and steps to implement a long-term capital improvement program to cease and desist from threatening to violate WDRs.

CDO No. 97-74 was revised in 2001, 2003, 2004, and most recently in 2005 (Order No. R1-2005-0085) to provide the District with additional time to implement a long-term solution to on-going Basin Plan and permit violations. CDO No. R1-2005-0085 was replaced with the current CDO No. R1-2012-0102.

In response to CDO No. 97-74, the District and Occidental Citizens' Advisory Committee proceeded to develop three alternatives for a long-term solution to violations. The alternatives were: 1) treatment plant upgrade and construction of a new effluent storage pond off Bones Lane northeast of Occidental; 2) a pipeline to the RRCSD WWTF in Guerneville; and 3) a community leach field. The first alternative was eliminated due to strong opposition from portions of the community regarding an effluent pond and irrigation in the Bones Lane area.

An environmental impact report (EIR) evaluating the remaining two alternatives was then prepared and the Occidental County Sanitation District Wastewater Treatment and Disposal Upgrade Project Draft EIR (DEIR) was issued for public comment in July 1999. The preferred alternative identified in the DEIR was the community leach field, to be sited on the hill above and westerly of Camp Meeker (the Aho site). The second alternative evaluated in the DEIR, a pipeline to the RRCSD WWTF, faced public opposition and was not pursued at that time. Ultimately, the leach field project was determined by the Regional Board to be unpermittable based on proposed loading rates and the project was not pursued.

The northerly community of Camp Meeker was also looking for solutions to its wastewater disposal challenges at that time. Camp Meeker is served by dated septic systems installed on steep slopes with thin soils, leading to many failing systems. The Camp Meeker Recreation and Park District (CMRPD) Board of Directors combined efforts with the District to find a common solution to the communities' wastewater challenges.

The CMRPD released the Camp Meeker Wastewater Reclamation Project DEIR in 2001 that identified six alternatives, five that would serve the combined needs of both Camp Meeker and Occidental. The preferred project included a new collection system in Camp Meeker with a force main to the District's existing lift station, combined wastewater treatment at a new tertiary-treatment facility on the existing District WWTF site; storage in a new pond on the Loades' site (owner of Graham's Pond); abandonment of the existing storage pond (Graham's Pond); and disposal of tertiary-treated effluent via irrigation or discharge from polishing woodlands/wetlands at a maximum of 5 percent of the flow of Dutch Bill Creek as measured at Camp Meeker. Alternatives included: a variation of the preferred project featuring discharge of tertiary-treated effluent at one and two percent of

the flow of Dutch Bill Creek, with associated increased storage and irrigation area demands; a combined Camp Meeker/Occidental system with treatment at an alternate location featuring discharges of tertiary-treated effluent at one or five percent of the flow of Dutch Bill Creek; and, a Camp Meeker-only treatment system at Alder Creek Ranch with discharges of tertiary-treated effluent at one percent of the flow of Dutch Bill Creek. It was subsequently determined that none of the alternatives analyzed in the 2001 DEIR were affordable to the communities, due largely to the extremely limited availability of grant funding. The US Department of Agriculture (USDA) indicated that it would not fund construction of a collection system for Camp Meeker.

Without Camp Meeker's participation, District ratepayers could not afford the new system. As a consequence, District ratepayers asked the Water Agency to explore other options for Occidental, expressly construction of a pipeline to convey Occidental wastewater to the RRCSD. The USDA and the Regional Board expressed support for the concept of a regional approach.

In 2006, the Water Agency and CMRPD determined that an additional potentially affordable alternative would be to return to the concept of transmission of wastewater to the RRCSD WWTF via a pipeline. A Subsequent EIR (SEIR) was utilized to allow the CMRPD to include previously explored alternatives evaluated in the 2001 DEIR. Ultimately, the CMRPD Board did not certify the EIR and did not pursue the project due to the cost of the proposed alternative. The Water Agency subsequently certified the SEIR to meet District obligations under CDO No. R1-2005-0085; however, the project was not pursued by the District because the cost of the proposed alternative was not economically feasible without the inclusion of the CMRPD.

As part of its effort to comply with CDO No. R1-2005-0085, the District replaced 4,000 feet of sewer mains and public laterals in 2007, thereby reducing long-standing inflow and infiltration problems in the collection system.

In 2011 the Water Agency, on behalf of the District began the development of a project that would solve the District's wastewater challenges by construction of an effluent storage pond that would meet the District's effluent capacity, bring the District back into compliance by ceasing discharge into Graham's Pond and Dutch Bill Creek, and expand irrigable lands. In order to pursue federal funding for the project, an Environmental Information Document (EID) was prepared by the District and submitted to the United States Environmental Protection Agency (USEPA) in December 2012 to determine whether an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) would need to be prepared to satisfy the requirements of the National Environmental Policy Act (NEPA). The EID identified and analyzed five alternatives, including modification of the existing storage pond (Graham's Pond) and construction of new storage ponds. The preferred project was for the construction of a 12.5 million gallon (MG)

recycled water storage pond at the southeast portion of the Loades' parcel. This pond alternative was selected because it avoided significant construction within asbestos-bearing soils, significantly reducing costs of the project. Additionally, the project would have been the least visible alternative site from public areas and would have avoided impacts to wetlands or other water bodies on the Loades' parcel.

The District issued a Notice of Preparation (NOP) of an EIR on 1 June 2013 and held a public scoping meeting on 20 June 2013 to discuss the project alternatives and gather public input. However, the project was abandoned due to lack of support from the public and land owners willing to participate in the project.

On 8 December 2014, the District posted a NOP of an Initial Study at the Sonoma County Clerks' Office. The NOP was also posted with the California Governor's Office of Planning and Research State Clearinghouse and sent to District ratepayers, stakeholders, interested persons, and property owners adjacent to the project area. The District held a public scoping meeting on 8 January 2015 during the public scoping period.

As part of the Initial Study process, an alternative to upgrade the District WWTF to tertiary-level treatment and pipe recycled water to a storage reservoir was analyzed for the ability to address the project objectives. The alternative to upgrade the level of treatment in turn identified potential sub-alternatives for treatment methods and upgrade locations that would be studied to determine the most feasible treatment upgrade alternative for the District. The transport of wastewater to another sanitation district for treatment, storage, and disposal was also identified as an alternative that could address the project objectives. At the time, costs and potential funding for the proposed alternatives were not fully identified and the focus of the scoping meeting included a discussion of the benefits and limitations of the various treatment upgrade alternatives.

Comments received during the public scoping period expressed concern about the proposed treatment upgrades including the location and safety of the recycled water storage pond, potential impacts to groundwater and surface water from the storage and irrigation of recycled water, costs and locations for treatment facility upgrades, property encroachment, and impacts to roadways from installation of the pipeline.

Following the scoping period, an engineering analysis was completed for the treatment facility upgrade alternatives and concluded that upgrades to the District WWTF were more feasible than upgrades at the District Lift Station.³ The analysis also concluded that similar levels of treatment could be achieved with each treatment method that would comply with NPDES requirements for treatment, storage, recycled water irrigation, and winter discharge. Costs were somewhat similar, however the feasibility analysis determined that the membrane bioreaction (MBR) alternative was the preferred treatment upgrade project alternative with slightly lower costs for construction, maintenance, and operation.

Costs were analyzed for the wastewater transport alternative and it was determined that construction costs for facility modifications were significantly lower than the construction costs associated with treatment upgrade alternatives. Annual operations and maintenance costs associated with wastewater transport to other sanitation facilities for treatment, storage, and disposal were also identified as being lower than the operations and maintenance costs for facility upgrade alternatives at the District. District staff also concluded that the wastewater transport alternative would likely have less environmental impacts compared to the facility upgrade alternative (e.g. the construction, operation, and maintenance of a recycled water pipeline and storage pond).

Ultimately, it was determined that the construction costs associated with the treatment upgrade alternatives were not economically feasible for the District ratepayers. Furthermore, the District did not qualify for grants that would help offset the cost. As a result, District staff began to pursue the wastewater transport alternative as the preferred project.

A community meeting was held on 7 January 2016 by District staff to discuss the engineering feasibility analysis and wastewater transport alternative with members of the public. There was disagreement among meeting attendees over the preferred location for treatment facility upgrades as well as the preferred pipeline route to the storage reservoir. In addition, several District ratepayers voiced support for the lower cost alternative of transporting wastewater to another facility as a long-term interim solution for treatment, storage, and disposal until funding for treatment upgrades could be obtained. Due to a lack of community consensus on the type and location of facility upgrades, concern about construction and operation of a recycled water pipeline and storage pond, and uncertainty about funding sources to offset costs for treatment upgrade, the wastewater transport alternative was identified as the preferred project that could address the objectives of the project in a cost effective manner.

As a result, an Initial Study/Negative Declaration for the Occidental County Sanitation District Wastewater Transport Compliance Project was completed that analyzed the potential impacts of transferring untreated wastewater by truck from the District facilities to the Russian River County Sanitation District (RRCSD) Main Lift Station, located on Highway 116 in the unincorporated community of Guerneville. The Proposed Project would discharge untreated wastewater into the Main Lift Station collection system through a receiving station that would be installed on an adjacent vacant parcel owned by the RRCSD. Untreated wastewater would then be pumped to the RRCSD WWTF for treatment, storage, and disposal. In situations where transferring untreated wastewater to the RRCSD would not be feasible, including lack of access to RRCSD facilities during flood events, operational limitations including heavy rain events during the irrigation season, or operational malfunctions, untreated wastewater would be transported to the ALWSZ WWTF for treatment, storage, and disposal.

The Initial Study/Negative Declaration was released for public review on 22 December 2016 and a public hearing was held on 16 February 2017 to give responsible and trustee agencies, District ratepayers, stakeholders, interested persons, and property owners in the project areas the opportunity to comment on the proposed project. Opposition to the proposed project amid concerns including traffic safety, noise, and odors, and a resulting lack of support from District ratepayers, led District staff to cease work on the proposed project to explore potential alternatives to transferring wastewater to the RRCSD.

Following the public hearing on 16 February 2017, District staff analyzed the feasibility of utilizing other sanitation districts to treat, store, and dispose of the District's untreated wastewater, including the Graton Community Services District and the ALWSZ. District staff determined that the most cost effective means to address the CDO and NPDES permit requirements and time limitations would be to transport all untreated wastewater to the ALWSZ WWTF.

As such, the District is undertaking this current effort to meet the requirements of the current Order No. R1-2012-0101 and CDO. No. R1-2012-0102, and provide a cost-effective solution for the community.

PROJECT DESCRIPTION

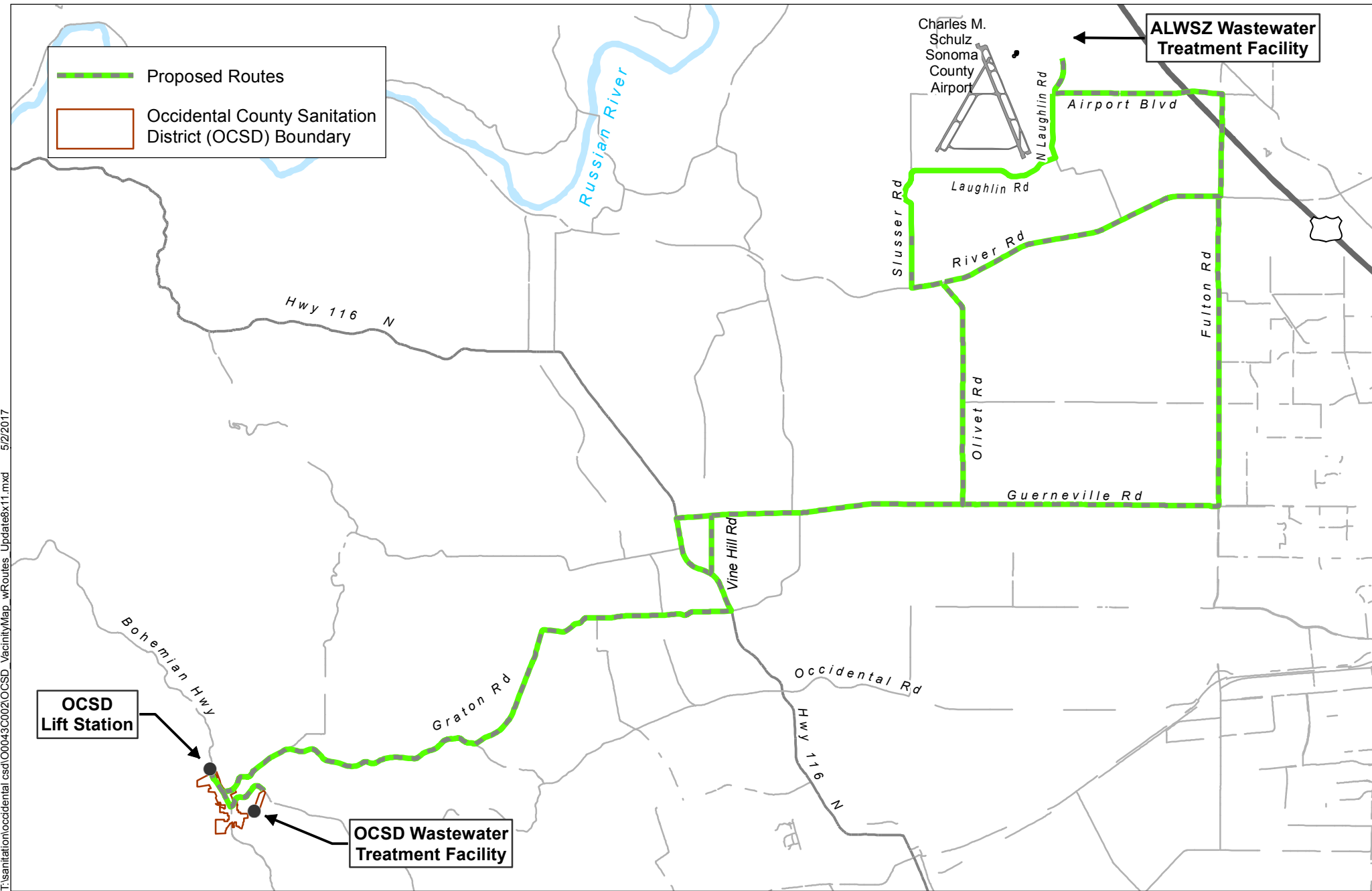
The Proposed Project would allow the District to comply with conditions set forth in Order No. R1-2012-0101. The Proposed Project would include transporting untreated wastewater from the District to the ALWSZ WWTF where it would be discharged into the ALWSZ collection system for treatment, storage, and disposal (Figure 3).

Vehicle trips would occur primarily between the District Lift Station and the ALWSZ WWTF. Vehicles would travel south on Occidental-Camp Meeker Road from the District Lift Station to Bohemian Highway, then travel south on Bohemian Highway to Graton Road and then east on Graton Road to Highway 116. Vehicles would continue north on Highway 116 to Guerneville Road or turn north on Vine Hill Road to Guerneville Road. Vehicles would then travel east on Guerneville Road, to either Olivet Road or Fulton Road.

If using Olivet Road, vehicles would travel north to River Road, west on River Road to Slusser Road, north on Slusser Road to Laughlin Road, east on Laughlin Road to Skylane Boulevard, and north on Skylane Boulevard to Aviation Boulevard.

Vehicles may also travel east on either Guerneville Road or River Road to Fulton Road and north on Fulton Road to Airport Boulevard, then west on Airport Boulevard to Skylane Boulevard, then north on Skylane Boulevard to Aviation Boulevard.

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**Occidental County Sanitation District to
Airport-Larkfield-Wikiup Sanitation Zone
Wastewater Transport Project
Proposed Wastewater Transportation Routes**

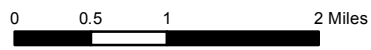


Figure 3



During heavy rainfall events when inflow to the District Lift Station exceeds storage capacity at the Lift Station and wastewater is stored at the District WWTF, vehicles transporting wastewater from the District WWTF would travel west on Occidental Road to Bohemian Highway and north to Graton Road. Vehicles would then utilize the same routes to return to the District Lift Station and WWTF.

The ALWSZ WWTF currently treats wastewater to Title 22 disinfected tertiary recycled water standards (CCR Title 22, Division 4, Chapter 3, Article 1) its primary treatment mode and utilizes irrigation of agricultural lands for disposal of its treated recycled water.⁴ Under certain conditions, such as extended durations of high inflow or plant shutdowns, the ALWSZ WWTF may operate under an alternative operational mode to provide treated wastewater meeting Title 22 disinfected secondary recycled water standards (CCR Title 22, Division 4, Chapter 3, Article 1) and utilize irrigation of agricultural lands for disposal of its treated recycled water.

By transferring untreated wastewater to the ALWSZ for treatment, storage, and disposal, the Proposed Project would eliminate the discharge and storage of secondary-treated effluent into Graham's Pond (a headwaters to Dutch Bill Creek) for recycled water irrigation during the dry season, and direct discharge to Dutch Bill Creek during the wet season.

Facility Modifications

The Proposed Project would modify existing facilities at the District WWTF, District Lift Station, and ALWSZ WWTF.

Modifications to the District WWTF would include the minor reconfiguration of existing above-grade piping and valves, the installation of below-grade piping and electrical conduit, and installation of a membrane liner in Pond No.1 (Figure 4). The area of disturbance at the OCSW WWTF would be entirely within the existing footprint of pond and developed land.

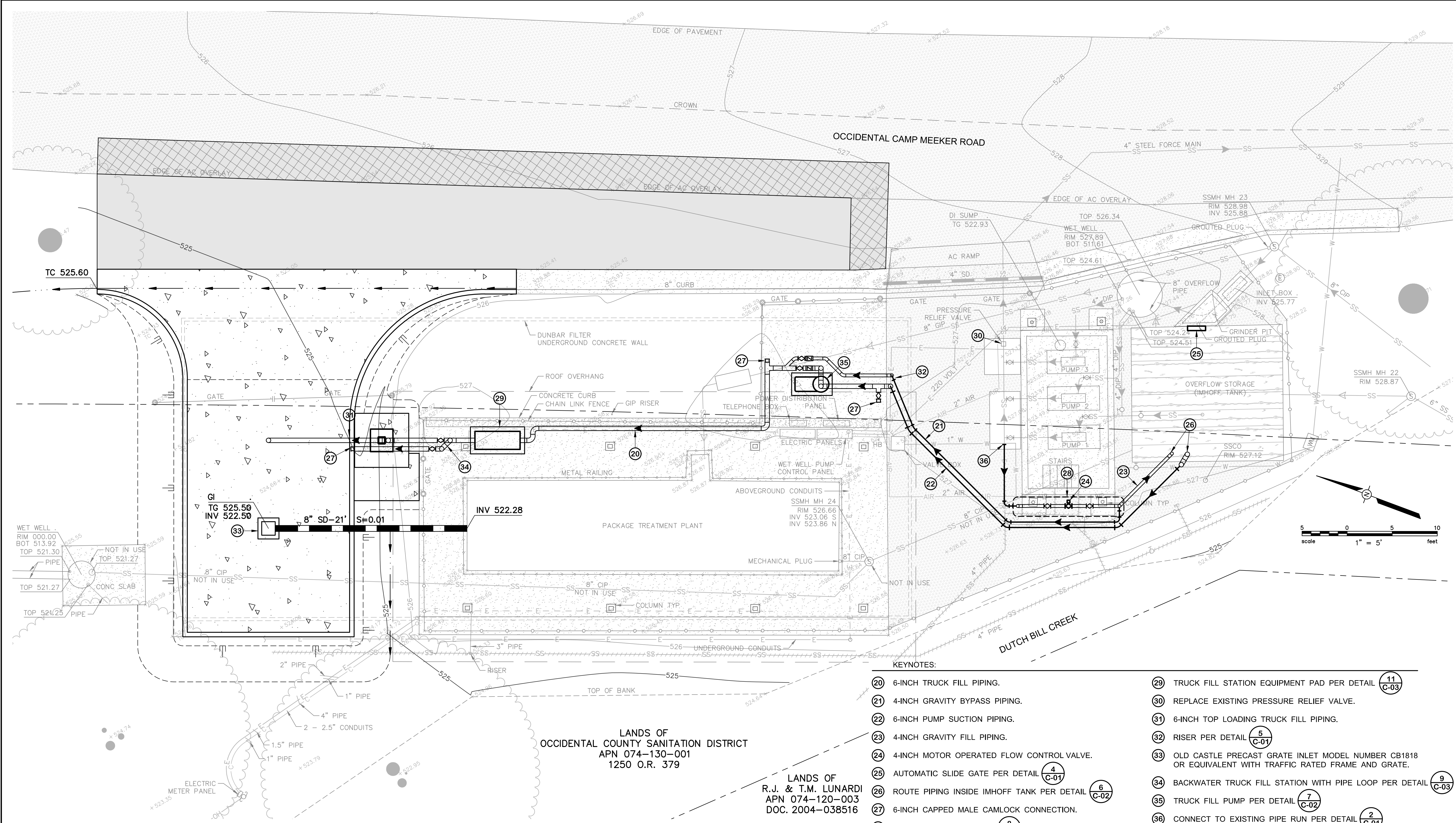
These modifications would allow the District to use existing above-ground storage tanks that are currently being utilized as chlorine contact chambers and Pond No. 1 for primary storage of untreated wastewater instead of Pond No. 2. An aerator would also be relocated from Pond No. 2 to Pond No. 1. Pond No. 2 would be retained for emergency storage. The existing water supply at the WWTF would be available in the event of a spill, or if necessary, to wash off trucks when wastewater is pumped directly from the storage ponds into trucks. A membrane pond liner would be installed in Pond No. 1 to facilitate the flushing and washing of remaining wastewater out of the pond and into the collection system to prevent odors when the pond is empty. Existing safety/security lighting at the District WWTF would be replaced with more efficient lighting.

Modifications to the District Lift Station would include installation of above- and below-grade piping and appurtenances (including valves and pumps, electrical and control panels), and installation of a truck-filling station in the existing facility turnout to facilitate the filling of tanker trucks with untreated wastewater for transport (Figure 5). The area of disturbance at the OCSD Lift Station would be entirely within the existing footprint of developed land. The existing water supply at the Lift Station would be used to provide adequate flush and wash water for the trucks or in the event of a spill, if necessary. Existing safety/security lighting at the District Lift Station would be replaced with more efficient lighting. Vegetative screening would also be installed at the District Lift Station to further screen the facility.

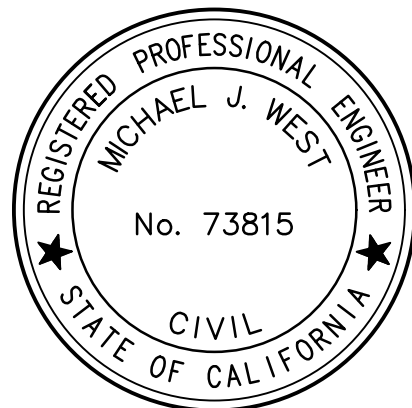
Modifications at the ALWSZ WWTF would include installation of above- and below-grade piping and appurtenances (including valves and pumps, electrical and control panels), and installation of a receiving station on previously disturbed and developed lands, including an existing gravel parking lot, to facilitate the draining of untreated wastewater from tanker trucks (Figure 6). An additional bypass dump station would be constructed at the receiving station to allow for wastewater receiving during utility outages or unforeseen receiving station shutdowns. An existing recycled water pipeline would be extended from the treatment facilities to the receiving station to provide adequate flush and wash water for the trucks or in the event of a spill, if necessary. The receiving station would connect to the ALWSZ WWTF through a new below-grade pipe that would connect to the existing collection system leading into the treatment facilities. The area of disturbance at the ALWSZ receiving station would be approximately 16,000 square feet (ft²), or 0.37 acres (ac.) of previously disturbed ruderal upland habitat.

Filling and receiving stations would each consist of a small control box that houses electrical controls and plumbing connections and would measure approximately six (6) feet in height, six (6) feet in width, and approximately two (2) feet in depth. Filling and receiving stations would be paved and include concrete curbing and drainage to contain potential spills and allow for the washing of vehicles, if necessary, and would direct all spills and runoff into the wastewater collection system. Trucks would utilize a hose to connect to the filling and receiving station control boxes to facilitate the transfer of untreated wastewater through a closed system. The filling station at the District Lift Station would also include an overhead pipe to fill trucks through the top of its tank. The bypass station at the ALWSZ would include a direct connection to the ALWSZ collection system. Existing facilities would be utilized to fill trucks at the District WWTF.

T:\sanitation\occidental\csl\Treatment Plant\00032_Truck_Fill_Station\DWG\00043_Plan



BAR LENGTH ON ORIGINAL
DRAWING EQUALS ONE INCH.
ADJUST SCALE ACCORDINGLY
Plotted by baikin on Aug 10, 2017 at 4:10pm



CHECKPRINT

PRELIMINARY
SUBJECT TO REVISION

OCCIDENTAL COUNTY
SANITATION DISTRICT

NO.	DATE	REVISION	BY

KEYNOTES:

- (20) 6-INCH TRUCK FILL PIPING.

(21) 4-INCH GRAVITY BYPASS PIPING.

(22) 6-INCH PUMP SUCTION PIPING.

(23) 4-INCH GRAVITY FILL PIPING.

(24) 4-INCH MOTOR OPERATED FLOW CONTROL VALVE.

(25) AUTOMATIC SLIDE GATE PER DETAIL **(4 C-01)**

(26) ROUTE PIPING INSIDE IMHOFF TANK PER DETAIL **(6 C-02)**

(27) 6-INCH CAPPED MALE CAMLOCK CONNECTION.

(28) VALVE RACK PER DETAIL **(8 C-02)**
- (29) TRUCK FILL STATION EQUIPMENT PAD PER DETAIL **(11 C-03)**

(30) REPLACE EXISTING PRESSURE RELIEF VALVE.

(31) 6-INCH TOP LOADING TRUCK FILL PIPING.

(32) RISER PER DETAIL **(5 C-01)**

(33) OLD CASTLE PRECAST GRATE INLET MODEL NUMBER CB1818 OR EQUIVALENT WITH TRAFFIC RATED FRAME AND GRATE.

(34) BACKWATER TRUCK FILL STATION WITH PIPE LOOP PER DETAIL **(9 C-03)**

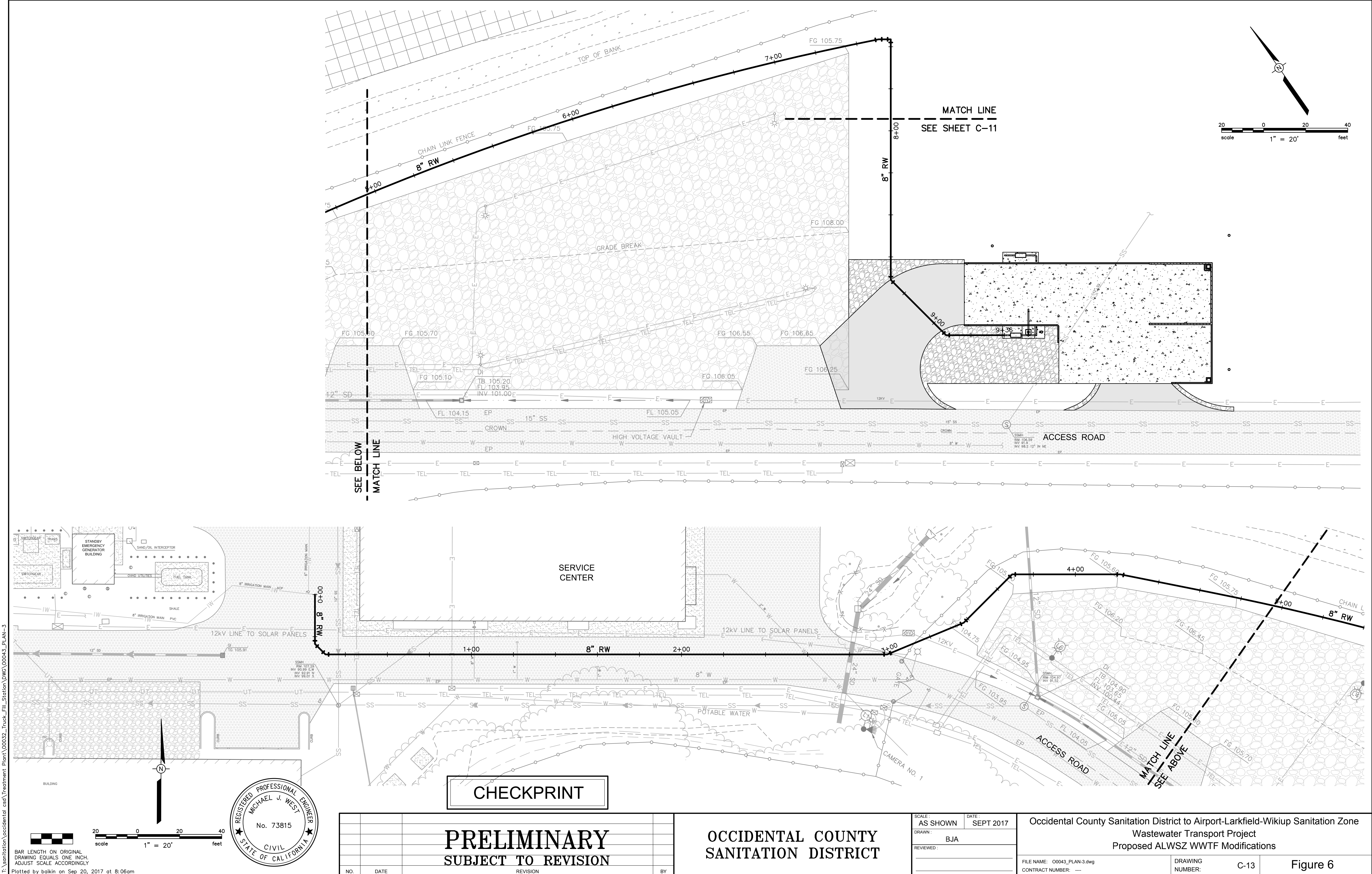
(35) TRUCK FILL PUMP PER DETAIL **(7 C-02)**

(36) CONNECT TO EXISTING PIPE RUN PER DETAIL **(2 C-01)**

SCALE:	DATE:
AS SHOWN	AUG 2017
DRAWN:	
	BJA
REVIEWED:	

Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone
Wastewater Transport Project
Proposed OCSD Lift Station Modifications

FILE NAME: 00043_PLAN.dwg	DRAWING NUMBER: C-07	Figure 5
CONTRACT NUMBER: ---		



I:\sanitation\accidental csd\Treatment Plant\00032_Truck_Fill_Station\DWG\00043_PLAN-3

BAR LENGTH ON ORIGINAL
DRAWING EQUALS ONE INCH.
ADJUST SCALE ACCORDINGLY
Plotted by baikin on Sep 20, 2017 at 8:06am



PRELIMINARY SUBJECT TO REVISION			
NO.	DATE	REVISION	BY

OCCIDENTAL COUNTY
SANITATION DISTRICT

SCALE:	AS SHOWN	DATE:	SEPT 2017
DRAWN:	BJA		
REVIEWED:			

Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project Proposed ALWSZ WWTF Modifications			
FILE NAME:	O0043_PLAN-3.dwg	DRAWING NUMBER:	C-13
CONTRACT NUMBER:	---		Figure 6

Operational activities would include the continued collection and storage of untreated wastewater at the District Lift Station and WWTF, including aeration at the WWTF to prevent odors and year-round transportation of untreated wastewater to the ALWSZ WWTF for treatment, storage and disposal. Combined storage capacity at the OCSD is approximately 770,000 gallons, which provides about seven (7) days of maximum inflow storage.⁵

Maintenance activities would include continued routine maintenance of the plumbing and electrical systems associated with the District's collection and storage facilities. Maintenance would also include routine management and maintenance of the plumbing and electrical systems associated with the truck filling and receiving activities at the District and ALWSZ. Routine operation and maintenance of the treatment, storage, and disposal facilities at the ALWSZ would remain similar to current levels.

Duration of Construction and Construction Staging Area

Facility Modifications

The duration of project construction would be approximately 6 months to complete the modifications at the sanitation facilities. Construction activities would generally occur between 7:00 a.m. and 5:00 p.m. on weekdays. It is anticipated that construction of the modifications would begin in early 2018 and would be completed by July 31, 2018. Staging areas would be located on previously disturbed and developed land within the existing footprint of the previously listed facilities and would not be located within sensitive areas, such as a wetland or a stream.

Construction Equipment

Required construction equipment would include, but would not be limited to the following: backhoe, paving equipment (asphalt hauling trucks, compactors, asphalt paver, smooth drum rollers), concrete truck, dump truck, water truck, utility trucks, air compressors, and power hand tools including a pavement saw and jack hammer.

Project-incorporated Best Management Practices

Measures to avoid and or substantially reduce environmental impacts are incorporated in the Proposed Project, as specified in Table 1. The Water Agency would require the selected Contractor(s) to use the Agency's Best Management Practices (BMPs), as defined in project plans and specifications. These BMPs would therefore be implemented as components of the project during all phases of construction. BMPs, such as dust and noise control procedures, would be implemented to avoid potential impacts to air quality and noise resources. These practices and procedures are intended to protect the environment by avoiding potential adverse environmental impacts.

Table 1. Proposed Project Best Management Practices

Number	Title	BMP Description
BMP-1	General Impact Avoidance and Minimization Work Window	<p>A. When ground disturbing activities occur outside the dry season, work would avoid significant rainfall events. Significant rainfall is defined as exceeding 0.1 inch of rain in a 24-hour period. Work would resume when conditions allow and as specified in the Storm Water Pollution Prevention Plan (SWPPP) that the contractor would be required to develop for the Proposed Project.</p> <p>B. In advance of the first significant rainfall event, exposed soils would be stabilized according to requirements of the SWPPP and BMPs for erosion and sediment control measures listed below for the Proposed Project.</p>
BMP-2	Noise Reduction Measures	<p>A. Routine construction, operations, and maintenance activities will take place between the hours of 7:00 am – 5:00 pm, Monday through Friday.</p> <p>B. Routine construction, operations, and maintenance activities would not occur on Saturdays, Sundays, or on District observed state holidays, except during emergencies, or with advance notification of surrounding residents.</p> <p>C. Equipment and trucks used for project construction, operations, and maintenance shall be equipped with properly installed engine mufflers.</p> <p>D. All construction machinery and equipment would be inspected to see if there are any problems that may contribute to increased noise levels and unsafe practices.</p> <p>E. As applicable, noise shall be minimized by shrouding or shielding impact tools.</p> <p>F. Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as feasible from nearby sensitive receptors.</p>
BMP-3	Vibration-Reducing Measures	<p>The Contractor shall implement the following practices during construction activities to minimize vibration-related impacts on local sensitive receptors:</p> <p>A. Ensure proper tuning of vibratory equipment;</p>

Number	Title	BMP Description
		<p>B. Limit use of vibratory equipment to daytime hours (7:00 a.m. to 5:00 p.m.) on weekdays; and</p> <p>C. Limit use of vibratory equipment to the extent feasible.</p>
BMP-4	Exhaust Control Measures	<p>A. All construction, operations, and maintenance equipment and vehicles shall be maintained and properly tuned in accordance with manufacturer's specifications.</p> <p>B. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time (as required by the California airborne toxics control measure Title13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.</p>
BMP-5	Minimize the Area of Disturbance	<p>A. To minimize impacts to natural resources, soil disturbance would be kept to the minimum footprint necessary to complete the project.</p> <p>B. The contractor shall install temporary construction fencing to protect trees and vegetation at the project site that will not be disturbed.</p> <p>C. During construction and as necessary, the contractor shall provide and maintain fences, barriers, signs, and other safety devices adjacent to and on the project site to prevent accidents and damage to property, the environment, and the public.</p>
BMP-6	Nesting Bird Protection Measures	<p>A. For any construction activities that must be scheduled to occur during the nesting season (February 15 through August 15 for most birds), a qualified wildlife biologist, familiar with the species and habitats in the Proposed Project areas, will conduct pre-construction surveys for raptors and nesting birds within suitable nesting habitat within 500 feet of construction activities. The surveys should be conducted within one week before initiation of staging, vegetation management, or construction activities within those habitats. If no active nests are detected during surveys, activities may proceed. Vegetation removal activities will be conducted under the guidance of a biologist.</p>

Number	Title	BMP Description
		<p>B. If active nests are identified within the construction areas, non-disturbance buffers shall be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover and species' tolerance to disturbance. Buffer size shall be determined by a qualified wildlife biologist in cooperation with the California Department of Fish and Wildlife (CDFW). If active nests are found within 500 feet of the project area, a qualified biologist shall be on site as necessary to monitor the nests for signs of nest disturbance. If it is determined that construction-related activity is resulting in nest disturbance, work shall cease immediately and CDFW shall be contacted. Buffers will be developed through consultation with CDFW. Buffers will remain in place until biologists determine that the young have successfully fledged or nests have been otherwise abandoned.</p>
BMP-7	Cultural Resource Protection Measures	<p>A. The project specifications will require the contractor to comply with the District's Standard Contract Documents regarding the discovery of cultural resources, including Native American cultural resources and items of historical, archaeological, or paleontological interest. The District Construction Inspector and construction personnel will be notified of the possibility of encountering cultural resources during project construction.</p> <p>1. Prior to initiation of ground-disturbing activities, the District shall arrange for construction crews to receive training about the kinds of cultural materials that could be present at the project site and the protocols to be followed should any such materials be uncovered during construction. Training shall be conducted by an archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61). Training may be required during different phases of construction to educate new construction personnel.</p> <p>B. The project specifications will provide that if discovery is made of items of historical, archaeological, cultural or paleontological interest, the contractor will immediately</p>

Number	Title	BMP Description
		<p>cease all work activities in the area of discovery. Historical, archaeological, cultural and paleontological indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, human bones, and fossils. After cessation of excavation, the contractor will immediately contact the District's Construction Inspector. The contractor will not resume work until authorization is received from the Construction Inspector.</p> <ol style="list-style-type: none"> 1. In the event of unanticipated discovery of archaeological materials occurs during construction, the District shall retain the services of a qualified professional archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61) to evaluate the significance of the items prior to resuming any activities that could impact the site. 2. In the case of an unanticipated archaeological discovery, if it is determined that the find is potentially eligible for listing in the California Register of Historical Resources and/or National Register of Historic Places, and the site cannot be avoided, the District shall provide a research design and excavation plan, prepared by a qualified archaeologist, outlining recovery of the resource, analysis, and reporting of the find. The research design and excavation plan shall be approved by the District. Implementation of the research design and excavation plan shall be conducted prior to work being resumed. <p>C. The project specifications will require the contractor to comply with Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, as they pertain to the discovery of human remains. If human remains are encountered, the contractor shall halt work in the vicinity of the find, and contact the District Construction Inspector and the Sonoma County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. As provided in Public Resources Code Section 5097.98, the Native</p>

Number	Title	BMP Description
		<p>American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The Most Likely Descendent (MLD) makes recommendations for means of treating the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. Work shall cease in the immediate area until the recommendations of the appropriate MLD are concluded.</p>
BMP-8	Erosion and Sediment Control Measures	<p>A. All soils disturbed or exposed during construction activities shall be seeded and stabilized using erosion control fabric or hydromulch.</p> <p>B. Erosion control fabrics shall consist of natural fibers that will biodegrade over time. No plastic or other non-porous material will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff.</p> <p>C. Erosion control measures shall be installed according to manufacturer's specifications.</p> <p>D. Appropriate measures include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • Silt Fences • Straw Bale Barriers • Brush or Rock Filters • Storm Drain Inlet Protection • Sediment Traps • Sediment Basins • Erosion Control Blankets and Mats • Straw wattles • Soil Stabilization (i.e., tackified straw with seed, jute or geotextile blankets, broad cast and hydroseeding, etc.)

Number	Title	BMP Description
		E. All temporary construction-related erosion control methods (e.g., silt fences) shall be removed at the completion of construction, or as directed by an erosion control specialist.
BMP-9	Dust Management Controls & Air Quality Protection	<p>A. All disturbed areas, including storage piles, which are not being actively used for construction purposes, shall be effectively stabilized for dust emissions, using water or a chemical stabilizer/suppressant, or by covering with a tarp or other suitable cover or a vegetative ground cover as necessary.</p> <p>B. All on-site unpaved roads shall be effectively stabilized for dust emissions by using water or a chemical stabilizer/suppressant as necessary.</p> <p>C. All land-clearing, grubbing, scraping, excavation, leveling, grading, cut-and-fill, and demolition activities shall be effectively controlled for fugitive dust emissions by applications of water or by presoaking as necessary.</p> <p>D. When materials are transported off-site, all material shall be covered or effectively wetted to limit visible dust emissions, and freeboard space from the top of the container shall be maintained.</p> <p>E. Sweep as necessary (with water sweepers or dry sweepers, as appropriate) all paved access roads, parking areas and staging areas at construction sites to limit fugitive dust emissions.</p> <p>F. Vehicle and equipment washing, including vehicle tires, shall occur onsite as necessary to limit fugitive dust emissions and prevent the spread of soil off of construction sites.</p> <p>G. Sweep streets as necessary (with water sweepers or dry sweepers, as appropriate) if visible soil material is carried onto adjacent public streets.</p> <p>H. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, the piles shall be effectively stabilized to limit fugitive dust</p>

Number	Title	BMP Description
		emissions through treatment with sufficient water or a chemical stabilizer/suppressant.
BMP-10	Staging and Stockpiling of Materials	<p>A. To the extent feasible, staging shall occur in disturbed areas that are already paved, or compacted and only support ruderal vegetation.</p> <p>B. Stockpiling of materials, including portable equipment, vehicles and supplies (e.g., chemicals), shall be restricted to the designated construction staging areas.</p> <p>C. No runoff from the staging areas shall be allowed to enter water ways without being subjected to adequate filtration (e.g., vegetated buffer, hay wattles or bales, silt screens).</p> <p>D. During the dry season, if stockpiled soils will remain exposed and unworked for more than 7 days then erosion control measures will be utilized. During the wet season, no stockpiled soils will remain exposed, unless surrounded by properly installed and maintained silt fencing or other means of erosion control.</p>
BMP-11	On-Site Hazardous Materials Management	<p>A. An inventory of all hazardous materials used (and/or expected to be used) at the worksite and the end products that are produced (and/or expected to be produced) after their use shall be maintained by the worksite manager.</p> <p>B. As appropriate, containers shall be properly labeled with a “Hazardous Waste” label and hazardous waste shall be recycled properly or disposed of off-site.</p> <p>C. Contact of chemicals with precipitation shall be minimized by storing chemicals in watertight containers or in a storage shed (completely enclosed), with appropriate secondary containment to prevent any spillage or leakage.</p> <p>D. Petroleum products, chemicals, cement, fuels, lubricants, and non-storm drainage water or water contaminated with the aforementioned materials shall not contact soil and not be allowed to enter surface waters or the storm drainage system.</p>

Number	Title	BMP Description
		E. All toxic materials, including waste disposal containers, shall be covered when they are not in use, and located as far away as possible from a direct connection to the storm drainage system or surface water.
BMP-12	Existing Hazardous Materials	<p>A. The project specifications will require the contractor to comply with the District's Standard Contract Documents regarding the removal, handling, containment, and disposal of existing hazardous wastes during construction activities. Approximately ten (10) cubic feet of concrete containing asbestos would be removed from the District Lift Station during modifications. The District's contractor shall carefully remove and dispose of all concrete containing asbestos from the District Lift Station according to Division of Occupational Safety & Health (DOSH), also known as Cal/OSHA, requirements and applicable hazardous waste containment, handling, and disposal laws. All hazardous materials would be disposed of at a properly licensed disposal facility.</p> <p>B. If hazardous materials, such as oil, batteries or paint cans, are encountered at the project site, the District's contractor(s) shall carefully remove and dispose of them according to the <i>Safety Plan</i> and <i>SWPPP</i> (as identified in the District's Standard Contract Documents).</p>
BMP-13	Spill Prevention and Response	<p>During construction, operations, and maintenance activities, the District's staff and contractor(s) shall prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water (including untreated wastewater) into channels following these measures:</p> <p>A. All field personnel shall be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills.</p>

Number	Title	BMP Description
		<p>B. Equipment and materials for cleanup of spills will be available on site and spills and leaks shall be cleaned up immediately and disposed of according to guidelines stated in the <i>SWPPP</i> (developed by the Contractor and approved by the District).</p> <p>C. Field personnel shall ensure that hazardous materials are properly handled and natural resources are protected by all reasonable means.</p> <p>D. Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., at crew trucks and other logical locations). All field personnel shall be advised of these locations.</p> <p>E. District staff shall routinely inspect the work site to verify that spill prevention and response measures are properly implemented and maintained.</p> <p><i>Spill Response Measures</i></p> <p>For small spills of untreated wastewater within the filling and receiving stations that have curbing and drainage, water would be used to wash the wastewater into the constructed drain to clean the area affected and facilitate returning the wastewater to the collection system. For other small spills on impervious surfaces, absorbent materials shall be used to remove the spill, rather than hosing it down with water. For small spills on pervious surfaces such as soil, the spill shall be excavated and properly disposed rather than burying it. Absorbent materials shall be collected and disposed of properly and promptly.</p>
BMP-14	Vehicle and Equipment Maintenance	<p>A. All vehicles and equipment shall be kept clean. Excessive build-up of oil and grease shall not be allowed.</p> <p>B. All equipment used shall be inspected for leaks each day prior to initiation of work. Action shall be taken to prevent or repair leaks, prior to use.</p> <p>C. Incoming equipment shall be checked for leaking oil and fluids. Leaking equipment will not be allowed onsite.</p>

Number	Title	BMP Description
		<p>D. No equipment servicing shall be done in proximity to water bodies, unless equipment stationed in these locations cannot be readily relocated (i.e., pumps and generators).</p> <p>E. If necessary, all servicing of equipment done at the job site shall be conducted in a designated, protected area to reduce threats to water quality from vehicle fluid spills. Designated areas shall not directly connect to the ground, surface water, or the storm drain system. The service area shall be clearly designated with berms, sandbags, or other barriers. Secondary containment, such as a drain pan, to catch spills or leaks shall be used when removing or changing fluids. Fluids shall be stored in appropriate containers with covers, and properly recycled or disposed of offsite.</p> <p>F. If emergency repairs are required in the field, only those repairs necessary to move equipment to a more secure location shall be conducted.</p> <p>G. Equipment shall be cleaned of any sediment or vegetation before entering the work area to avoid spreading pathogens or exotic/invasive species.</p> <p>H. Vehicle and equipment washing shall occur onsite as needed to prevent the spread of sediment, pathogens or exotic/invasive species. No runoff from vehicle or equipment washing shall be allowed to enter water bodies, including channels and storm drains, without being subjected to adequate filtration (e.g., vegetated buffers, hay wattles or bales, and silt screens).</p>
BMP-15	Vehicle and Equipment Fueling	<p>A. For stationary equipment, secondary containment, such as a drain pan or drop cloth, shall be used to prevent accidental spills of fuels from reaching the soil, surface water, or the storm drain system.</p> <p>B. All non-stationary equipment fueling shall be done in staging areas equipped with secondary containment and avoid a direct connection to soil, surface water, or the storm drainage system.</p>

Number	Title	BMP Description
BMP-16	Work Site Housekeeping	<p>A. The District's contractors shall maintain the work site in neat and orderly conditions on a daily basis, and will leave the site in a neat, clean, and orderly condition when work is complete. Slash, sawdust, cuttings, etc. shall be removed to clear the site of vegetation debris. As needed, paved access roads shall be swept and cleared of any residual vegetation or dirt resulting from construction and maintenance activities. All trash that is brought to a project site during construction and maintenance activities (e.g., plastic water bottles, plastic lunch bags, cigarettes) shall be removed from the site daily.</p> <p>B. Materials or equipment left on the site overnight shall be stored as inconspicuously as possible, and will be neatly arranged.</p>
BMP-17	Good Neighbor Practices	<p>A. Post signs at construction sites pertaining to permitted construction days and hours and who to notify in the event of a problem.</p> <p>B. Designate a construction manager for the Proposed Project who will respond to complaints.</p> <p>C. Include a list of telephone numbers to reach the construction manager for the Proposed Project (during regular construction hours and off-hours).</p>

Project Operations and Maintenance

Facility Modifications

The existing District Lift Station would continue to function as a collection and short-term storage system and would have operations and maintenance activities similar to existing activities. The District WWTF would be utilized as a storage facility only and ongoing operations and regular maintenance activities would be very similar, if not less frequent, to current operation and maintenance activities associated with the storage of wastewater at the WWTF. Operation and maintenance activities related to the treatment and discharge of wastewater at the District WWTF would no longer occur. Operation and maintenance activities at the ALWSZ WWTF would be consistent with existing activities and treatment, storage and disposal of wastewater from the District would be incorporated into the existing operation and maintenance activities at the ALWSZ sanitation facility.

Wastewater Transportation

Vehicles utilized for the transportation of untreated wastewater from the District to the ALWSZ will be staged and maintained at existing Water Agency facilities located at the ALWSZ WWTF when not in use.

BASIS FOR PREFERRED PROJECT

Selection of the preferred project is the result of over 15 years of evaluations of other potential projects. The objective of the Proposed Project is to bring the District into compliance with the Regional Board waste discharge requirements (WDRs) included in the District's NPDES permit, address requirements of CDO No. R1-2012-0102, and continue to meet the wastewater treatment needs of the District in a cost effective manner.

PROJECT ALTERNATIVES

In addition to the proposed project alternatives previously considered and included in the Project Background sub-section, the Notice of Preparation (NOP) of an Initial Study for the OCSD to ALWSZ Wastewater Transport Project (Appendix A) discussed the feasibility of utilizing other sanitation districts to treat, store, and dispose of the District's untreated wastewater, including the Graton Community Services District (GCSD). However, District staff identified potential timing issues related to GCSD Board approval and permit modifications, as well as potential treatment and capacity issues, and ultimately determined that the most cost effective means to address the District CDO time limitations and NPDES permit requirements would be to transport all untreated wastewater to the ALWSZ WWTF.

No Project Alternative

Selection of the No Project alternative would mean that the District would not construct the facility modifications or transport untreated wastewater from the District to the ALWSZ WWTF for treatment, storage, and disposal. The result would be the continued violation of the WDRs Order No. R1-2012-0101 due to the need to continue discharge to Dutch Bill Creek and additional monetary fines for failing to comply with the Order and CDO No. R1-2012-0102.

NOTICE OF PREPARATION AND SUMMARY OF COMMENTS

On May 26, 2017, a NOP of an Initial Study (Appendix A) was posted at the Sonoma County Clerks' Office. The NOP was also posted with the California Governor's Office of Planning and Research State Clearinghouse and sent to District ratepayers, stakeholders, interested persons, and property owners adjacent to the project area. The District held a public scoping meeting on June 15, 2017, during the public scoping period.

During the public scoping period, the District identified the transport of wastewater to the ALWSZ for treatment, storage, and disposal as the preferred alternative that could address the project objectives. As discussed in the Background section of the NOP, costs had been previously analyzed for wastewater transport alternatives and it had been determined that construction costs for facility modifications were significantly lower than the construction costs associated with treatment upgrade alternatives. Annual operations and maintenance costs associated with wastewater transport to other sanitation facilities for treatment, storage, and disposal were also identified as being lower than the operations and maintenance costs for facility upgrade alternatives at the District. District staff also concluded that wastewater transport alternatives would likely have less environmental impacts compared to the facility upgrade alternatives (e.g. the construction, operation, and maintenance of a recycled water pipeline and storage pond).

Comments received during the public scoping period expressed concern about the proposed transportation routes, traffic safety, road condition, and noise, as well as capacity at the ALWSZ to treat, store, and dispose of the district's wastewater. Some stakeholders expressed support for treatment upgrade alternatives in place of the transportation of untreated wastewater to other sanitation districts, and others expressed support for transportation to the GCSD (Appendix A).

However, due to the economic costs associated with the facility treatment upgrades as well as the requirements of the CDO and Order, the transportation of untreated wastewater to the ALWSZ WWTF was identified as the only feasible alternative that can address the objectives of the project in a cost effective and time sensitive manner.

ENVIRONMENTAL SETTING

The Russian River watershed consists of a series of valleys surrounded by two mountainous coastal ranges, the Mendocino Highlands to the West and the Mayacamas Mountains to the east. The Santa Rosa Plain, Alexander Valley, Hopland (or Sanel) Valley, Ukiah Valley, Redwood Valley, Potter Valley and other small valleys comprise about 15 percent of the watershed. The remaining area is hilly to mountainous. Principal communities are Ukiah, Hopland, Potter Valley, Cloverdale, Healdsburg, Windsor, Forestville, Sebastopol, Graton, Santa Rosa, Rohnert Park, Cotati, Rio Nido, Guerneville, Monte Rio, Duncans Mills, Camp Meeker, Occidental, and Jenner. The project areas are located in the community of Occidental in western unincorporated Sonoma County, and Santa Rosa in central Sonoma County. Occidental is located in a rural area surrounded by hilly terrain. Occidental serves as a town center for the surrounding rural areas. Santa Rosa is an incorporated urban city located on the Santa Rosa Plain and serves as the county seat.

The Proposed Project facility sites are located at existing District and ALWSZ facilities. Wastewater transport would occur on surrounding public roadways in the region including, but not limited to Occidental-Camp Meeker Road, Bohemian Highway, Graton Road, Occidental Road, Highway 116, Vine Hill Road, Guerneville Road, Olivet Road, River Road, Slusser Road, Laughlin Road, Fulton Road, and Airport Boulevard. The project facilities are currently surrounded by residential homes, ranches, a cemetery, forested lands, agricultural lands, and commercial and industrial areas, including the Charles M. Schulz-Sonoma County Airport. The roadways are mainly through rural residential and agricultural lands with pockets of urban residential and commercial areas including, but not limited to, the communities of Occidental, Graton, and Santa Rosa.

Topography

Sonoma County is located within the Coast Range Geomorphic Province, a more or less discontinuous series of northwest trending mountain ranges, ridges, and intervening valleys characterized by complex folding and faulting⁶. During the last 25 million years the geologic and geomorphic structures were primarily created and dominated by faulting, which continues to the present day. Topography at the District WWTF, District Lift Station, and the ALWSZ WWTF facilities is relatively flat. Topography in the vicinity of the sanitation facilities to be utilized for the project varies from rolling to relatively steep slopes in the Occidental area, and relatively flat land to gently rolling hills in the area around the ALWSZ and Charles M. Schulz-Sonoma County Airport.

Soils and Geology

The Franciscan rocks are generally considered to be of Jurassic and Cretaceous Age (about 65 to 205 million years old)⁷. Overlying the basement rocks are Cretaceous marine, as well as Tertiary (about 65 to 1.6 million years old) marine and non-marine

sedimentary rocks with some continental volcanic rock. These Cretaceous and Tertiary rocks have typically been extensively folded and faulted largely as a result of movement along the San Andreas Fault system over the last 25 million years. Consequently the Franciscan terrain includes a wide variety of rocks including shale, chert, sandstone, basalt, volcanic tuff, serpentinite and a wide array of other rocks metamorphosed to varying grades. The inland valleys in Sonoma County are generally filled with unconsolidated to semi-consolidated deposits of Quaternary Age (about 1.6 million years to present). Continental deposits (alluvium and colluvium) consist of unconsolidated to consolidated sand, silt, clay, and gravel mixtures.

Seismicity

The San Andreas Fault system is a right-lateral, strike-slip fault zone that extends mostly on land from the Gulf of California in Mexico, to Cape Mendocino on the Humboldt County coast in northern California⁸. The San Andreas Fault itself defines the boundary between the North American Plate to the east and the Pacific Plate to the west. The Pacific Plate has been moving 1 to 2 inches a year to the north, relative to the North American Plate for the last 25 million years. The San Andreas Fault is located approximately 7.5 miles to the west of the District WWTF and Lift Station, and approximately 18 miles west of the ALWSZ WWTF.

Within the West Sonoma County area, movement across this plate boundary is primarily distributed across the San Andreas Fault and the Rogers Creek fault⁹. The Rodgers Creek Fault is located approximately 12.5 miles to the east of Occidental and approximately 2.5 miles east of the ALWSZ WWTF. The Maacama Fault is located approximately 17.5 miles to the east-northeast of Occidental and approximately 7 miles east-northeast of the ALWSZ WWTF. Together, these faults are referred to as the San Andreas Fault System (SAF). For most of the length of the San Andreas Fault, basement rock on the west side is generally of Cretaceous Age (about 65 to 140 million years old) and is granitic rock of the 'Salinian block' unit. To the east of the fault, basement bedrock consists of a chaotic mixture of highly deformed marine sedimentary, submarine, volcanic, and metamorphic rocks of the Franciscan Complex.

Vegetation

The District WWTF and Lift Station have been previously developed and paved and do not support any vegetation communities within the areas that will be modified for this project. The primary plant communities in the surrounding areas include Mixed Evergreen Forest, Non-Native Grassland, and Riparian Woodland along Dutch Bill Creek.

The modifications proposed at the ALWSZ WWTF would occur on previously disturbed and developed lands, including ruderal, gravel, and paved areas that do not support sensitive vegetation communities. The primary plant communities in the surrounding areas include Non-Native Grassland and Riparian Woodland.

Construction, operation, and maintenance activities would not result in the removal of any mature, scenic trees. Operation and maintenance activities would occur on existing roads and at existing sanitation facilities. A list of special-status plant species and the potential to occur in the locations proposed for facility modifications is included in Table 2.

Table 2. Special-Status Plant Species with Potential to Occur in the Vicinity of the Proposed Project Areas¹

Common Name <i>Scientific Name</i>	Status ²	Habitat	Potential to Occur
Baker's larkspur <i>Delphinium bakeri</i>	FE, SE CNPS 1B.1	Broadleaved upland forest, coastal scrub, and valley and foothill grassland.	None. Present at several locations along coastal hills in Marin and Sonoma counties. No suitable habitat present in project areas.
Baker's manzanita <i>Arctostaphylos bakeri ssp. bakeri</i>	SR CNPS 1B.1	Broadleaved upland forest. Chaparral. Often found on serpentine soils.	None. Present in areas east of Duncans Mills and Occidental. No suitable habitat present in project areas.
Burke's goldfields <i>Lasthenia burkei</i>	FE, SE CNPS 1B.1	Vernal pools, meadows and seeps.	None. Present in vernal pool habitat in Sonoma and Mendocino counties. No suitable habitat present in project areas.
Golden larkspur <i>Delphinium luteum</i>	FE, SR CNPS 1B.1	Chaparral, coastal prairie, coastal scrub. North facing rocky slopes.	None. Present at several locations along coastal hills in Marin and Sonoma counties. No suitable habitat present in project areas.
Many-flowered navarretia <i>Navarretia leucocephala ssp. plieantha</i>	FE, SE CNPS 1B.2	Vernal pools and wetlands.	None. Present in vernal pools in Windsor area. No suitable habitat present in project areas.
North Coast semaphore grass <i>Pleuropogon hooverianus</i>	ST CNPS 1B.1	Meadows and seeps and mesic openings in broadleaved upland forest and North Coast coniferous forest.	None. Present in the Freestone area. No suitable habitat within the project areas.
Pennell's bird's-beak <i>Cordylanthus tenuis ssp. capillaris</i>	FE, SR CNPS 1B.2	Closed-cone coniferous forest, chaparral. In open or disturbed areas on serpentine within forest or chaparral.	None. Present in Occidental and Camp Meeker area. No suitable habitat present in the project areas.

Common Name <i>Scientific Name</i>	Status ²	Habitat	Potential to Occur
Sebastopol meadowfoam <i>Limnanthes vinculans</i>	FE, SE CNPS 1B.1	Meadows and seeps, vernal pools, and valley and foothill grassland.	None. Present in vernal pool habitat in Santa Rosa and Sebastopol area. No suitable habitat present in the project areas.
Showy Rancheria (two-fork) clover <i>Trifolium amoenum</i>	FE CNPS 1B.1	Coastal bluff scrub and valley and foothill grassland. Sometimes on serpentine soil.	None. Reported from the Freestone and Bodega Bay areas. No suitable habitat present in the project areas.
Sonoma alopecurus <i>Alopecurus aequalis</i> var. <i>sonomensis</i>	FE, CNPS 1B.1	Freshwater marshes and swamps and riparian scrub.	None. Present in Duncans Mills and Guerneville areas near or adjacent to the Russian River. No suitable habitat present in the project areas.
Sonoma sunshine <i>Blennosperma bakeri</i>	FE, SE CNPS 1B.1	Vernal pools and swales in valley and foothill grassland.	None. Present in vernal pool habitat in Santa Rosa, Sonoma, and Rohnert Park area. No suitable habitat present in the project areas.
Tidestrom's (clover) lupine <i>Lupinus tidestromii</i>	FE, CE, CNPS 1B.1	Coastal dunes. Elevation 0 to 330 feet.	None. Reported on vegetated sand dunes at Goat Rock State Beach. No suitable habitat within the project areas.

¹Species List: Species listed in this table were developed from lists prepared by the USFWS and CDFW for the OCSD to ALWSZ Wastewater Transport Project.

²Legal Status:

FE: Federally listed as Endangered

FT: Federally listed as Threatened

SE: State of California listed as Endangered

ST: State of California listed as Threatened

SR: State of California listed as Rare

CNPS = California Native Plant Society

List 1B.1: Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California

List 1B.2: Plants rare, threatened, or endangered in California and elsewhere, fairly threatened in California

Wildlife and Fisheries

Wildlife habitats present within or adjacent to the project facilities include ruderal/developed, non-native grassland, mixed evergreen forest, and riparian woodland habitats. Ruderal habitat and non-native grassland provides limited forage and cover for wildlife, and typically supports a low diversity of disturbance-adapted wildlife species.

Construction activities would take place within previously developed sanitation facilities and disturbed and developed lands that consist of paved areas, hardscape, and ruderal vegetation, and are necessary for utility modifications. Construction, operation, and maintenance activities would not result in the removal of any mature, scenic trees. Operation and maintenance activities would occur on existing roads and at existing sanitation facilities.

Wildlife species observed in developed and previously disturbed ruderal habitat areas at the project facilities include species typically associated with high levels of human activity and disturbance including western fence lizard (*Sceloporus occidentalis*), house finch (*Haemorhous mexicanus*), European starling (*Sturnus vulgaris*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), raccoon (*Procyon lotor*), and opossum (*Didelphis marsupialis*).

Species associated with the adjacent non-native grassland, mixed evergreen forest, and riparian woodland habitat include Stellar's jay (*Cyanocitta stelleri*), western scrub jay (*Aphelocoma californica*), Cooper's hawk (*Accipiter cooperii*), mule deer (*Odocoileus hemionus*), Canada goose (*Branta Canadensis*), western bluebird (*Sialia mexicana*), Botta's pocket gopher (*Thomomys bottae*), and Pacific tree frog (*Pseudacris regilla*). In addition, Dutch Bill Creek supports federally threatened steelhead (*Oncorhynchus mykiss*) and state and federally endangered coho salmon (*Oncorhynchus kisutch*).

A list of special-status animal species and the potential to occur in the locations proposed for facility modifications is included in Table 3.

Table 3. Special-Status Wildlife Species with Potential to Occur in the Vicinity of the Proposed Project areas¹

Scientific Name Common Name	Legal Status ²	Habitat	Potential to Occur
Invertebrates			
Behren's silverspot butterfly <i>Speyeria zerene behrensii</i>	FE	Restricted to the Pacific side of the Coast Ranges from Point Arena to Cape Mendocino. Inhabits coastal prairie terrace habitat. Food plant is violet.	Unlikely. Nearest recorded occurrence is in Mendocino County. No suitable habitat within the project areas.
California freshwater shrimp <i>Syncaris pacifica</i>	FE, SE	Perennial creeks with slow flows and developed bank vegetation. Needs deep undercut banks with exposed roots for winter refugia.	Unlikely. Several occurrences in tributaries of the Russian River, including Green Valley, Austin, and Blucher creeks. No suitable aquatic habitat in the project areas.
Myrtle's silverspot butterfly <i>Speyeria zerene myrtleae</i>	FE	Coastal dunes, coastal terrace, coastal bluff scrub and associated coastal dunes/grasslands in Sonoma and Marin counties. Larvae have a single host, western dog violet (<i>Viola adunca</i>).	Unlikely. Reported from Goat Rock State Beach south of the Russian River mouth. No suitable habitat in the project areas.
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE	Inhabits rocky outcrops and cliffs in coastal scrub on the San Francisco Peninsula. Host plant is the Broadleaf Stonecrop (<i>Sedum spathulifolium</i>).	Unlikely. Outside of known range and no suitable habitat in the project areas.
Fish			
Coho salmon <i>Oncorhynchus kisutch</i>	FE, SE	Requires beds of loose, silt-free, coarse gravel for spawning. Also cover, cool water, and sufficient dissolved oxygen.	None. Present in Russian River watershed including Dutch Bill Creek. No suitable aquatic habitat in the project areas.
Navarro roach <i>Lavinia symmetricus navarroensis</i>	CSC	Found in warm intermittent streams as well as cold, well aerated systems.	None. Present in Russian River in Healdsburg and in Mark West Creek. No suitable aquatic habitat in the project areas.

Russian River tule perch <i>Hysterocarpus traski</i> <i>pomo</i>	CSC	Low elevation streams of the Russian River system. Clear flowing water with abundant cover and deep pool habitat	None. Present in the Russian River and larger streams. No suitable aquatic habitat in the project areas.
Steelhead <i>Oncorhynchus mykiss</i> <i>irideus</i>	FT	Found in aquatic habitat in cool waters with sufficient oxygen.	None. Present in Russian River watershed including Dutch Bill Creek. No suitable aquatic habitat in the project areas.
Amphibians			
California giant salamander <i>Dicamptodon ensatus</i>	CSC	Adults prefer damp coniferous forests near streams. Adults breed in perennial mountainous streams with rocky substrate. Larvae are aquatic for one or more years. Occasionally occurs in lakes and ponds, but usually at higher elevations.	Low. Several reports from Russian River tributaries from Jenner to Cloverdale area. No suitable habitat in the project areas.
California red-legged frog <i>Rana draytonii</i>	FT, CSC	Creeks, ponds, and marshes with permanent or temporary water bordered by emergent or riparian vegetation. Requires 4-6 months of permanent water for larval development.	Low. Reported occurrences from tributaries and ponds in the lower Russian River area. No suitable aquatic habitat in the project areas.
California tiger salamander <i>Ambystoma californiense</i>	FE, ST, WL	Grasslands and valley foothill woodland habitats with appropriate subterranean refuge sites (burrows). Breeds in fishless vernal pools and seasonal ponds.	Unlikely. Several occurrences on the Santa Rosa Plain in the vicinity of Santa Rosa to Cotati. No recorded observations in the project areas. Marginal upland habitat in adjacent fields at ALWSZ. Outside designated Critical Habitat area.
Foothill yellow-legged frog <i>Rana boylei</i>	CSC	Moderate to high gradient streams with gravel to cobble substrate. Breeds in areas with slower moving water. Tadpoles use rocky shallow creek margins for cover and grazing.	Low. Reported in the Russian River from Ukiah to Duncans Mills. Several reports from tributaries of the Russian River. No suitable habitat in the project areas.

Reptiles			
Western pond turtle <i>Emys marmorata</i>	CSC	Streams, ponds, and lakes. Upland nesting sites are typically unshaded, south facing slopes with soils of high clay or silt composition.	Low. Known from several occurrences in the Russian River. No suitable habitat in the project areas.
Birds			
Bank swallow <i>Riparia riparia</i>	ST	Colonial nester in vertical banks and cliffs next to water.	Unlikely. One report near Jenner along the Russian River from 1960. Unlikely to occur in the project areas, based on historic record. No suitable habitat in the project areas.
Marbled murrelet <i>Brachyramphus marmoratus</i>	FT, SE	This coastal seabird from the North Pacific nests in old-growth coniferous forests. Foraging occurs in open ocean for small fish.	Unlikely. No old-growth forest or Critical Habitat within the project areas. Unlikely to nest or forage in the project areas.
Northern spotted owl <i>Strix occidentalis caurina</i>	FT, SC CSC	Old growth forests or mixed stands of old growth and mature trees. High, multistory canopy dominated by big trees, many trees w/cavities or broken tops, woody debris, and space under canopy.	Low. No reports from the project areas, but likely uses mature forests in the vicinity. May be infrequent visitor in the vicinity of the project areas. No suitable habitat in the project areas.
Osprey <i>Pandion haliaetus</i>	WL	Occurs in ponderosa pine and mixed conifer habitats along sea coasts, lakes, and rivers. Foraging (fishing) areas require large snags and open trees near large, clear, open water.	Low. Several nesting reports along the Russian River. May nest in trees and occasionally forage in habitat in the vicinity of the project areas. No suitable habitat in the project areas.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT, SE	Requires patches of at least 25 acres of dense riparian forest with a canopy cover of at least 50 percent in both the understory and overstory; nests typically in mature willows.	Unlikely. The project areas are located outside the normal breeding range for this species; may occur as an infrequent transient. No suitable habitat in the project areas.

White-tailed kite <i>Elanus leucurus</i>	FP	Forages in grasslands, open woodlands, agricultural fields, and marshes. Nests in trees with dense foliage.	Low. Reported from Healdsburg and Guerneville areas. May nest in trees and occasionally forage in habitat adjacent to the project areas.
Mammals			
American badger <i>Taxidea taxus</i>	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Low. Known from several occurrences in upland habitats in the Russian River watershed. May occasionally visit terrestrial habitats in the vicinity of the project areas. No suitable habitat in the project areas.
Pallid bat <i>Antrozous pallidus</i>	CSC	Forages in a variety of habitats. Roosts in caves, crevices, mines, and occasionally hollow trees and buildings. Prefers mesic sites.	Low. Reported from the Russian River vicinity. All records are from buildings. Riparian areas and bridges in the vicinity of the project areas are potential foraging and roosting habitat. No suitable habitat in the project areas.
Sonoma tree vole <i>Arborimus pomo</i>	CSC	Old growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats along the coast from Sonoma County north to the Oregon border. Restricted to the fog belt. Eats almost exclusively Douglas fir needles.	Low. Reported in the Russian River watershed, mainly in coastal areas. Report from Jenner area. However, no suitable habitat within the project areas.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	SC CSC	Occurs throughout most of California in mesic sites. Roosts in the caves, mines, tunnels, buildings, etc. Extremely sensitive to human disturbance.	Low. Five records from Guerneville, Healdsburg, and Hopland from 1946 to 1987. Bridges over the Russian River may provide roosting habitat. No suitable habitat in the project areas.

Western red bat <i>Lasiurus blossevillii</i>	CSC	Occurs throughout most of central and southern California, except alpine and desert regions. Roosts in trees and forages in a variety of open habitats.	Moderate. Reported from Guerneville area at a rock quarry in 2003 and Alexander Valley in 1954. Riparian trees in vicinity of the project areas may provide roosting habitat. No suitable habitat in the project areas.
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¹Species List: Species listed in this table were developed from lists prepared by the USFWS and CDFW for the OCSD to ALWSZ Wastewater Transport Project.

²Legal Status:

FE: Listed as endangered under the FESA.

FT: Listed as threatened under the FESA.

FC: A candidate for listing under the FESA.

FSC: USFWS Species of Concern.

SE: Listed as endangered under the California Endangered Species Act (CESA).

ST: Listed as threatened under the CESA.

SC: Candidate for listing under the CESA.

CSC: A CDFW Species of Special Concern.

WL: CDFW Watch List.

FP: Fully protected under California Fish and Game Code (Birds §3511; Mammals §4700; Reptiles and Amphibians §5050; Fish §5515).

Cultural Resources

The project sites are located on previously developed and disturbed District facilities that do not contain archaeological resources or historical buildings or structures within the study areas. All project modifications would occur on previously developed lands, including paved and hardscape areas. Tom Origer and Associates conducted an archival records search for the Proposed Project locations and submitted summaries of the results and recommendations on 11 August 2017 (Appendix B). The archival records search identified two previously known tribal cultural resource sites, CA-SON-1323 and CA-SON-1324 that have been recorded within the ALWSZ study area (Appendix B). The Proposed Project modifications at the ALWSZ WWTF are at least 1,000 feet away from CA-SON-1323 and CA-SON-1324, and no Proposed Project activities would occur on these sites. There are seven additional resources recorded within a half-mile of the study area. The

Tribal Cultural Resources

Formal AB52 tribal consultation was initiated with several Native American tribes that are known to have traditional lands or cultural places located within the boundaries of the Proposed Project. The Water Agency has received a formal request for AB52 consultation from the Middletown Rancheria for projects subject to CEQA. In addition, District staff submitted a letter of request to the Native American Heritage Commission (NAHC) on 15 May 2017 for a list of tribes to consult about potential tribal cultural resources in the Proposed Project areas. The NAHC provided the consultation list of the Native American tribes that are known to have traditional lands or cultural places located within the boundaries of the Proposed Project on 17 May 2017. Formal AB52 consultation letters were sent on 23 May 2017 to the tribes identified on the NAHC consultation list, including Middletown Rancheria (Appendix C).

The Federated Indians of Graton Rancheria (FIGR) responded on 7 July 2017. District staff provided the FIGR with the archival records search results conducted by Tom Origer and Associates that describes the known cultural resources in the study areas, the potential for the Proposed Project to affect cultural resources, and recommendations. District staff also requested information from FIGR, if available, for any Tribal Cultural Resources that should be considered in preparation of the CEQA document.

LAND USE AND CONFORMANCE WITH GENERAL PLAN

Historical and Present Land Use

The District and ALWSZ facilities have been in place and operating since the 1970s and 1980s. Property adjacent to the existing sanitation facilities include rural and urban residential, agricultural, industrial and commercial lands, including the Charles M. Schulz-Sonoma County Airport.

Conformance with the General Plan

The project area is subject to the land use policies and designations adopted in the Sonoma County General Plan (General Plan)¹⁰. The General Plan designates the project areas as follows: the District WWTF and Lift Station are designated as Rural Residential at a specified density of 10 acres per unit; and the ALWSZ is designated as Public/Quasi-Public. The Proposed Project would not limit or restrict any existing activities that occur in the project area.

RIGHTS-OF-WAY ISSUES

All Proposed Project modifications and operations would occur at existing District and ALWSZ facilities that are collectively operated and maintained by the Water Agency. Roads utilized for the wastewater transport aspect of this Proposed Project would occur on public roadways and Lu Dan Road in Occidental, where the District currently has an easement for right of way access to the District WWTF.

ENVIRONMENTAL EVALUATION

The potential environmental impacts of the Proposed Project are identified in the Environmental Checklist. All of the impacts identified in the checklist are considered less than significant or no impact. In addition, the Proposed Project incorporates BMPs as defined in project plans and specifications for activities associated with the OCSD to ALWSZ Wastewater Transport Project (Table 1).

JURISDICTIONAL/PERMITTING AGENCIES

The following are public entities and agencies that may require review of the project or that may have jurisdiction over the project area:

- United States Army Corps of Engineers (USACE)
- United States Fish and Wildlife Service (USFWS)
- National Marine Fisheries Service (NMFS)
- California Department of Fish and Wildlife (CDFW)
- California Department of Transportation (Caltrans)
- North Coast Regional Water Quality Control Board (NCRWQCB)
- Sonoma County Permit and Resource Management Department (PRMD)

FINDING

On the basis of this initial evaluation, the General Manager of the Sonoma County Water Agency has determined that the Proposed Project would not have a significant effect on the environment.

ENVIRONMENTAL CHECKLIST

An assessment of the Proposed Project's environmental impacts is based on the Environmental Checklist Form included as Appendix G of the State's CEQA Guidelines (California Code of Regulations Title 14, Division 6, Chapter 3, Section 15000 et seq.). The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section provides a brief overview of existing environmental conditions for each resource topic to help the reader understand the conditions that could be affected by the Proposed Project. In addition, each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question.

With regard to the checklist, a "No Impact" response indicates that no impact would result from implementation of the project. A "Less than Significant" impact response indicates that an impact is involved, but is at a level that is less than significant. A "Less than Significant with Mitigation" response indicates that an impact may potentially be significant, but the incorporation of mitigation measures would reduce the impact to a level of insignificance. A "Potentially Significant Impact" response indicates that impacts may be significant if mitigation measures are unknown, infeasible, or not proposed. Each response is discussed at a level of detail commensurate with the potential for adverse environmental effect. Mitigation measures identified in this section would be incorporated into the project, and included in a Mitigation Monitoring Plan.

Resources reviewed for relevant information are cited as applicable.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | |
|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Transportation and Traffic |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Tribal Cultural Resources |

- | | |
|--|---|
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Utilities and Service Systems |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Land Use and Planning | |

I. AESTHETICS

Would the proposal:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. Construction would involve minor modifications at existing public sanitation facilities and would not have a substantial adverse effect on a scenic vista. The project facilities that would be modified are located at the District WWTF on Lu Dan Road in Occidental, District Lift Station on Occidental-Camp Meeker Road in Occidental, and at the ALWSZ WWTF on Aviation Boulevard in Santa Rosa. Construction activities at the District WWTF would be partially visible to adjacent land owners and vehicle and pedestrian traffic on Lu Dan Road. Construction activities at the District Lift Station would be visible to one land owner located across Dutch Bill Creek from the lift station and to vehicle and pedestrian traffic on Occidental-Camp Meeker Road. Construction activities at the ALWSZ WWTF would be partially visible to adjacent businesses, but not visible from public roadways or private residences. There may be a short-term aesthetic impact associated with construction activities at the facilities to be modified. Construction activities would require the use of heavy equipment and temporary storage of materials at the sites. During construction, equipment, excavated areas, stockpiled soils and other materials within the project areas may be considered an aesthetic impact by some people. However, any visual impacts would be temporary during the construction phase. Modifications at the District WWTF, District Lift Station, and ALWSZ WWTF would occur entirely within the existing footprint of developed portions of the facilities and would not change the visual character of that facility. Operations and maintenance activities would include the use of vehicles and power tools. The majority of roads to be used for wastewater transport and maintenance activities are identified as Scenic Corridors in the Sonoma County General Plan 2020¹¹. Highway 116 is designated as a State Scenic Highway¹². However, there

would be no impact because the Proposed Project would not interrupt or block, or otherwise have a substantial effect on scenic vistas.

- b) No Impact. The Proposed Project would not result in any damage of scenic resources. No mature trees would be removed during modifications to the District and ALWSZ sanitation facilities and there are no rock outcroppings or historic buildings of visual significance on the Proposed Project sites. Please refer to Item I a) for additional information.
- c) Less than Significant. The Proposed Project would not result in any significant degradation of the existing visual character or quality of the project areas. The proposed modifications to the existing sanitation facilities would include minor modifications that would occur on previously developed lands that consist of paved areas and hardscape and would not alter the visual character of the sites. The ALWSZ is located adjacent to a commercial and industrial business park and the Charles M. Schulz Sonoma County Airport and is largely screened from view by vegetation and distance to the nearest businesses. Project modifications, operations, and maintenance activities on existing developed portions of the ALWSZ WWTF would not degrade the existing visual character or quality of the project area. The presence of vehicles at the District Lift Station would be more frequent than currently occurs, however, the site is located on a fairly isolated section of Occidental-Camp Meeker Road and is only visible to one residence located across Dutch Bill Creek. In addition, the Lift Station is partially screened from the roadway by site topography and existing vegetation, and from the neighboring residence by vegetation and a fence. As part of the project design, additional vegetative screening and/or fencing would be incorporated into the improvements at the Lift Station to provide further visual screening of the filling station from the roadway and adjacent residential properties. Please refer to Item I a) for additional information.
- d) No Impact. The Proposed Project would require safety and security lighting associated with the filling and receiving stations; however, the light or glare associated with the lighting would be directed downward and away from nearby residences and would not adversely affect day or nighttime views in the areas. Existing lighting at the District WWTF and Lift Station would be replaced with more efficient lighting. Lighting installed to serve the filling and receiving stations would be programmable and would be programmed to turn off when not in use. In addition, the transportation of wastewater would generally occur during normal daytime business hours between 7:00 am and 5:00 pm, Monday through Friday. Construction activities would generally be restricted to the hours between 7:00 am and 5:00 pm, Monday through Friday, and lighting of the construction area is not anticipated. Therefore, there would be no impacts from potential light and glare associated with construction, operation, and maintenance of the Proposed Project. Please refer to Item I a) for additional information.

II. AGRICULTURAL AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. No conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur as a result of the construction of modifications to the existing sanitation facilities or the transportation of municipal waste between

existing sanitation facilities. The Proposed Project would not result in the conversion of any farmlands to non-agricultural uses.

- b) No Impact. The Proposed Project would not result in any changes in land use that would conflict with existing zoning for agricultural use or a Williamson Act contract.
- c) No Impact. The Proposed Project would not conflict with existing zoning, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. No timber harvest activities are occurring or expected to occur within the project areas.
- d) No Impact. Please refer to the above Item II c) above. The Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use.
- e) No Impact. Please refer to the above Item II a) above. The Proposed Project would not result in a change in the existing environment that could result in a conversion of Farmland to non-agricultural use.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

Air Basins

A portion of the Project area is located within southern Sonoma County and the San Francisco Bay Area Air Basin (SFBAAB). The Bay Area Air Quality Management District (BAAQMD) is responsible for attaining and maintaining the National and California Ambient Air Quality Standards (NAAQS and CAAQS) in the SFBAAB. The BAAQMD has jurisdiction over southern Sonoma County, including Sonoma, Petaluma, and Santa Rosa.

Another portion of the Project area is located within northern Sonoma County and the North Coast Air Basin (NCAB) and the jurisdiction of the Northern Sonoma County Air Pollution Control District (NSCAPCD). The NCAB encompasses Del Norte, Humboldt, Trinity, and Mendocino counties as well as the northern portion of Sonoma County.

Criteria air pollutants include Ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), and others. The California Environmental Protection Agency's Air Resources Board (CARB) and the U.S. Environmental Protection

Agency (EPA) focus on these criteria air pollutants as indicators of ambient air quality because they are the most prevalent air pollutants known to be harmful to human health. Standards have been set for these pollutants to protect public health and welfare.

Ozone, also called smog, is not emitted directly into the environment, but is formed in the atmosphere by complex chemical reactions between reactive organic gases (ROG) and Oxides of Nitrogen (NO_x) in the presence of sunlight. Nitric oxide (NO) and nitrogen oxide (NO₂) are the primary compounds produced. Nitrogen oxides (NO_x) can produce a brown haze that is visible in the atmosphere. Warm, windless, sunny days result in the highest ozone levels. The main sources of NO_x and ROG, also referred to as ozone precursors, are combustion processes such as motor vehicle engines. Other sources include evaporation of solvents, paints, and fuels, and biogenic sources.

Particulate matter (PM₁₀ and PM_{2.5}) refers to a wide range of solid or liquid particles in the atmosphere that come from a variety of stationary, mobile, and natural sources. Power production, cement manufacturing, combustion, fireplaces, diesel trucks, and forest fires are all sources of particulate emissions. Particulate matter includes dust, smoke, aerosols, and metallic oxides. Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM₁₀. A subgroup of PM₁₀ with an aerodynamic diameter of 2.5 micrometers or less is referred to as PM_{2.5}. Some particulate matter, such as pollen, occurs naturally.

Carbon monoxide (CO) comes from motor vehicles as well as the burning of wood for fuel and heat in residential homes. State and federal controls on new motor vehicles and voluntary efforts to reduce wood burning have been implemented to prevent CO from reaching adverse levels.

California's ambient air monitoring network includes over 250 sites where air pollution levels are monitored. There are generally more monitoring sites in areas with reduced air quality and greater population. Ambient concentration data are collected for a wide variety of pollutants, including Ozone, Particulate Matter, and several toxic compounds. Each monitoring site, however, only monitors for pollutants that are elevated in that area¹³.

The BAAQMD operates a network of monitoring stations throughout the SFBAAB that monitor ambient concentrations of Ozone, Oxides of Nitrogen (NO and NO₂), Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Hydrogen Sulfide (H₂S), PM_{2.5} and PM₁₀, hydrocarbons, elemental and organic carbon, and various hazardous air pollutant compounds¹⁴.

The BAAQMD monitoring station relevant to southern Sonoma County was located on 5th Street in Santa Rosa through 2013; however, the Santa Rosa monitoring station ceased operation and was replaced by a station on Morris Street in Sebastopol starting in January 2014. Data for Ozone, NO₂, and PM_{2.5} are available for these sites¹⁵. The NSCAPCD

operates a network of monitoring stations that monitor ambient concentrations of Ozone and PM₁₀ and include locations in Guerneville, Healdsburg, and Cloverdale. Within the last five years, three days have exceeded California standards for PM₁₀ at the Guerneville air quality monitoring station as shown in Table 4 below.

Table 4. Days Exceeding Standard for Ozone and Particulate Matter in the Project Area

	Standard	Number of Days Exceeding Standard				
		2012	2013	2014	2015	2016
Ozone (O₃)*	CAAQS (1-hr avg. 0.09 ppm)	0	0	0	0	0
	CAAQS (8-hr avg. 0.070 ppm)	0	0	0	0	0
	NAAQS (8-hr avg. 0.070 ppm)	0	0	0	0	0
Respirable Particulate Matter (PM₁₀)**	CAAQS 24-hr (50 µg/m³)	0	1	0	2	0
	NAAQS 24-hr (150 µg/m³)	0	0	0	0	0
Fine Particulate Matter (PM_{2.5})*	NAAQS 24-hr (35 µg/m³)	0	0	0	0	0

Source: CARB. Available at <https://www.arb.ca.gov/adam/topfour/topfour1.php>. Accessed August 3, 2017.

*Ozone and PM_{2.5} data available at Santa Rosa monitoring station through 2013 and at Sebastopol monitoring station starting 2014.

**PM₁₀ data available at Guerneville monitoring station.

The two air basins in which the Proposed Project would be located are in attainment, or within standards, for most criteria pollutants. The portion of the NCAB within the jurisdiction of the NCSAPCD is considered to be in attainment or unclassified for all CAAQS and NAAQS standards, therefore the NSCAPCD is not required to have an Air Quality Plan. The SFBAAB is a “nonattainment” area for PM_{2.5} and Ozone with regard to NAAQS standards and PM_{2.5}, PM₁₀, and Ozone with regard to CAAQS standards. The BAAQMD’s 2017 Clean Air Plan (CAP) is the applicable clean air plan that has been prepared to address nonattainment issues in the SFBAAB¹⁶.

a) Less than Significant. The Proposed Project is within the jurisdiction of the BAAQMD and NSCAPCD. While the NCSAPCD does not have a prepared air quality plan, the BAAQMD’s 2017 CAP is applicable to a portion of the Proposed Project area. The BAAQMD *CEQA Guidelines* 2017 revision identifies a three-step methodology for determining a project’s consistency with the current clean air plan¹⁷. If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

- 1) “Does the project support the goals of the air quality plan?” In order to determine whether or not the project supports the goals of the applicable air quality plan, the BAAQMD recommends comparing project-related emissions to BAAQMD

thresholds of significance. Specifically, if a project would not result in significant and unavoidable air quality impacts after the application of all feasible mitigation measures, the project would be considered consistent with the goals of the 2017 CAP. As indicated in the following discussion with regard to air quality impact questions b) and c), construction and operation of the Proposed Project would result in a less-than-significant air quality impact. Maintenance activities for the Proposed Project would remain consistent with existing ongoing maintenance activities at the sanitation facilities. As such, emissions from maintenance activities of the treatment facilities would be similar to, but smaller in scale than, construction-related emissions. Therefore, the Proposed Project would support the primary goals of the 2017 CAP and be consistent with the 2017 CAP.

2) *“Does the project include applicable control measures from the clean air plan?”*

The 2017 CAP contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered consistent with the 2017 CAP. Two of the 2017 CAP stationary source control measures are applicable to operation of the Proposed Project: WR1 (Limit Greenhouse gas (GHGs) from POTWs [Publicly-Owned Treatment Works]) and WR2 (Support Water Conservation). Since the Proposed Project would transfer wastewater to a more efficient treatment plant, expand the reuse of treated wastewater for agricultural irrigation, and would not result in a substantial increase in GHG emissions (see Section VII), the Proposed Project would not hinder the implementation of the 2017 CAP measures.

3) *“Does the project disrupt or hinder implementation of any control measures from the clean air plan?”* As previously discussed, the Proposed Project would not create any barriers or impediments that would hinder implementation of the 2017 CAP control measures. The responses to all three of the questions with regard to plan consistency are affirmative and the Proposed Project would not conflict with or obstruct implementation of the 2017 CAP.

As a result, the Proposed Project would not conflict with or obstruct the implementation of applicable air quality plans. This is a less-than-significant impact.

- b) No Impact. The Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. The Proposed Project would result in emissions related to construction, operation, and maintenance activities. The BAAQMD adopted CEQA thresholds of significance for air quality related to construction activities in June 2010. In March 2012, the Alameda County Superior Court issued a judgment stating that adopting CEQA thresholds was a project under CEQA. While those thresholds were set aside until the BAAQMD complied with CEQA, the construction-related thresholds continue to provide useful

guidance when determining significance. In order to estimate emissions from construction-related activities, the California Air Resources Board's (CARB) emissions factors (EMFAC2014) were used to estimate transportation-related emissions and the CARB's OffRoad2007 emission factors were used to estimate emissions from construction equipment¹⁸. According to CARB, the average age of California's tractors, loaders, and backhoes is 10.0 years and the average age of excavators is 9.2 years; therefore, emission rates for construction equipment were chosen based upon the assumption that construction equipment used would be approximately 10 years old¹⁹.

Criteria pollutant emissions from the construction and operation of the Proposed Project are compared to BAAQMD-proposed Thresholds for Construction-related activities and BAAQMD Operational Thresholds and are summarized in Tables 5 and 6²⁰. Maintenance activities for the Proposed Project would remain consistent with existing ongoing maintenance activities at the sanitation facilities. As such, emissions from maintenance activities of the treatment facilities would be similar to, but smaller in scale than, construction-related emissions.

Table 5. Project-related Construction Emissions Compared to BAAQMD Proposed Thresholds for Construction-related Activities

Pollutant	BAAQMD Average Daily Emissions Thresholds for Construction-related Activities pounds per day (lb/day)*	Project-related Maximum Daily Construction Emissions pounds per day (lb/day)
Reactive Organic Gases (ROG)	54	0.17
Oxides of Nitrogen (NOx)	54	4.33
Respirable Particulate Matter (PM₁₀ exhaust)	82	0.14
Fine Particulate Matter (PM_{2.5} exhaust)	54	0.03

*Bay Area Air Quality Management District. 2017. Update to the current CEQA Guidelines and Thresholds of Significance. May 9, 2017. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed September 5, 2017.

Criteria pollutant emissions from the construction and operation of the Proposed Project are summarized in Table 7 below and compared to NSCAPCD annual operational thresholds as there are no proposed construction emission thresholds for the NSCAPCD.²¹

Table 6. Project-related Operation Emissions Compared to BAAQMD Operational Thresholds

Pollutant	BAAQMD Average Daily Emissions Thresholds pounds per day (lbs/day)*	Project Average Daily Emissions pounds per day (lbs/day)	BAAQMD Maximum Annual Thresholds tons per year (tpy)*	Project Annual Emissions tons per year (tpy)
Reactive Organic Gases (ROG)	54	0.03	10	0.03
Oxides of Nitrogen (NOx)	54	0.63	10	-
Respirable Particulate Matter (PM₁₀ exhaust)	82	0.00	15	-
Fine Particulate Matter (PM_{2.5} exhaust)	54	0.00	10	-

Bay Area Air Quality Management District. 2017. Update to the current CEQA Guidelines and Thresholds of Significance. May 9, 2017. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed September 5, 2017.

Table 7. Project Construction- and Operation-related Emissions Compared to NSCAPCD Annual Thresholds for Operation in tons per year (tpy)

Pollutant	Northern Sonoma County APCD Annual Emissions Threshold tons per year (tpy)	Project-related Construction Emissions tons per year (tpy)	Project-related Annual Operation Emissions tons per year (tpy)
Reactive Organic Gases (ROG)	40	0.02	0.03
Oxides of Nitrogen (NOx)	40	0.39	0.00
Fine Particulate Matter (PM_{2.5} exhaust)	10	0.00	0.00
Respirable Particulate Matter (PM₁₀ exhaust)	15	0.01	0.00
Carbon Monoxide (CO)	100	0.30	0.00

California Air Resources Board. 2017. Northern Sonoma County APCD List of Current Rules. Regulation I. Chapter 1 – General Provisions. R1-1-130 Definitions. Rule 130. <https://arb.ca.gov/drdb/nsc/cur.htm>. Accessed September 25, 2017.

Criteria air pollutant emissions related to construction, operation, and maintenance of the Proposed Project would fall well below existing and proposed thresholds for both the NSCAPCD and the BAAQMD. In addition, to further avoid potential impacts relating to air quality, construction activities would incorporate the use of BMPs, as defined in project plans and specifications.

- c) No Impact. The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Please refer to Item III a).
- d) No Impact. The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Please refer to Item III a). There are no schools, hospitals or health care facilities nearby.
- e) No Impact. The construction, operation, and maintenance of the Proposed Project would not create objectionable odors affecting a substantial number of people. Construction of facility modifications would be minor in nature and of short duration and would not result in objectionable odors. The operation and maintenance of the collection and storage facilities at the District Lift Station and WWTF would remain similar to current operations and maintenance activities. Likewise, the operation and maintenance of the ALWSZ sanitation facilities would remain similar to current activities.

IV. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, including, but not limited to, marsh, vernal pool, coastal, through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) Less than Significant. The Proposed Project would not have any direct effect on any candidate, sensitive or special-status species and would not involve any habitat modification. All project construction would occur on previously developed and disturbed lands that consist of paved areas, hardscape, and ruderal vegetation and would not result in disturbance of special-status species or modify habitats adjacent or in the vicinity of the Proposed Project locations. All vehicle traffic associated with

construction, operation, and maintenance of the Proposed Project would occur on existing paved roadways or previously disturbed areas and would not result in disturbance of special-status species or modify habitats adjacent or in the vicinity of the Proposed Project locations. Prior development of the ALWSZ parking lot resulted in the identification of the ruderal field as potential upland habitat for California tiger salamander (CTS) and mitigation credits were purchased to satisfy USACE permit requirements.²² However, the ruderal field underlying the parking lot and proposed receiving station has been identified as being outside special-status species critical habitat designations, including CTS critical habitat (Appendix D). Therefore, the proposed project would not modify critical habitat. Please refer to the Environmental Setting for a description of habitat and special-status species that could potentially occur at the Proposed Project locations.

The surrounding project areas includes potential nesting habitat for numerous common and special-status birds. Proposed Project activities are not anticipated to result in impacts to these species as construction activities would incorporate the use of BMPs, as defined in project plans and specifications (Table 1). For example, for construction that would occur during the bird nesting season (February 15 – August 15 for most birds), pre-construction surveys would be conducted within one week before initiation of construction activities. If active nests are identified within the project site area, non-disturbance buffers would be established. Buffer size would be determined by a qualified wildlife biologist in cooperation with the California Department of Fish and Wildlife (CDFW). Buffers would remain in place until biologists determine that the young have successfully fledged. These practices and procedures protect biological resources by avoiding or minimizing potential adverse impacts during construction activities, which minimize impacts to less than a significant level.

- b) No Impact. The Proposed Project will not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. All construction activities would occur at existing facilities on previously developed and disturbed lands that consist of paved areas, hardscape, and ruderal vegetation and would not result in disturbance of riparian or special-status species habitats adjacent or in the vicinity of the Proposed Project locations. All vehicle traffic associated with construction, operation, and maintenance of the Proposed Project would occur on existing paved roadways or previously disturbed areas and would not result in disturbance of special-status species habitats. Please refer to the Environmental Setting for a description of vegetation communities in the proximity of the Proposed Project locations. All construction work would avoid the removal of mature trees. In addition, construction, operation, and maintenance activities associated with the Proposed Project would not increase the ambient sound

levels or level of activity to a degree that would disturb animal species existing in areas that are already developed and subject to human disturbance and regular vehicle traffic.

- c) No Impact. The Proposed Project will not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act, including, but not limited to, marsh, vernal pool, coastal, through direct removal, filling, hydrological interruption, or other means. The Proposed Project is being constructed on previously developed and disturbed lands that consist of paved areas, hardscape, and ruderal vegetation and that do not support wetland habitat.
- d) No Impact. The Proposed Project will not interfere substantially with the movement of any native resident or migratory fish or any native resident or migratory wildlife species. Modification to the existing sanitation facilities will occur on previously developed land including paved and hardscape areas and ruderal non-native vegetated areas.
- e) No Impact. The modifications to the existing sanitation facilities would not conflict with any local policies or ordinances protecting biological resources, including a tree preservation policy or ordinance, and would not include the removal of any mature scenic trees.
- f) No Impact. The Proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local regional, or state habitat conservation plan.

V. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

Tom Origer and Associates conducted an archival records search for the Proposed Project locations and submitted summaries of the results and recommendations on August 11, 2017 (Appendix B). The archival records search identified two previously known tribal cultural resource sites, CA-SON-1323 and CA-SON-1324 that have been recorded within the ALWSZ study area (Appendix B). The Proposed Project modifications at the ALWSZ WWTF are at least 1,000 feet away from CA-SON-1323 and CA-SON-1324, and no Proposed Project activities would occur on these sites. There are seven additional resources recorded within a half-mile of the study area. However, no project activities would occur on these sites.

- a) No Impact. All Proposed Project construction would occur at existing sanitation facilities on previously developed and disturbed lands including paved and hardscape areas and ruderal non-native vegetated areas. The project is not anticipated to have an adverse effect to historical or archaeological resources. However, excavation during project construction has the potential to expose and affect subsurface cultural resources that were not visible or identified during the archival records search for the project. To further minimize and avoid potential impacts to unknown cultural resources, construction activities would incorporate the use of BMPs, as defined in project plans and specifications (Table 1). For example, prior to initiation of ground-disturbing activities, BMP 7 would require the District to provide education training for construction crews about the kinds of cultural materials that could be present at the project site and the protocols to be followed should any such materials be uncovered during construction. Training shall be conducted by an archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and

Appendix A to 36 CFR 61). BMP 7 would also require the contractor to comply with the District's Standard Contract Documents regarding the accidental discovery of cultural resources. The project specifications would provide that if discovery is made of items of historical, archaeological or paleontological interest, the contractor would immediately cease all work activities in the area of discovery. The contractor would not resume work until authorization is received from the Construction Inspector. The project specifications would require the contractor to comply with Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, pertaining to the discovery of human remains. These practices and procedures protect cultural resources by avoiding or minimizing potential adverse impacts during construction activities.

- b) No Impact. Please refer to Item V a).
- c) No Impact. No unique paleontological resources or unique geologic features were identified within the project site. Please refer to Item V a).
- d) No Impact. No cultural or historical resources that could contain human remains have been identified within the project site. Please refer to Item V a).

VI. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) 1) Less than Significant. The Proposed Project facilities to be modified are not located within known earthquake fault zones, as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Maps²³ issued by the State Geologist for the areas, or based on other substantial evidence of known faults. A geotechnical investigation was unnecessary since facility modifications, including ground disturbance, would be minimal in nature and would occur in relatively flat areas that are currently paved or were previously developed. The proposed sites are geologically suitable for the

planned facility modifications. In addition, the Proposed Project would be constructed to the standards of the most recent California Building Code, as applicable. Furthermore, the Proposed Project would not include the development of habitable structures that would be subject to substantial structural damage or that would expose people to substantial adverse effects including loss, injury, or death. Therefore, compliance with these design standards would ensure that potential adverse effects to people or structures from the rupture of a known earthquake fault would be less than significant.

- a) 2) Less than Significant. Intensity of ground shaking at the site would depend on the distance to the earthquake epicenter, the magnitude of the quake, and the response characteristics of the underlying materials. Please refer to the Environmental Setting for a description of the proximity of Proposed Project locations in relation to earthquake faults. According to the Association of Bay Area Governments (ABAG) Earthquake Shaking Scenarios²⁴, the Proposed Project facilities are located within areas of strong to very strong ground shaking in a scenario with a 7.8 magnitude earthquake along the San Andreas Fault. In the scenario of a 7.1 magnitude earthquake along the Rodgers Creek fault strong to very strong ground shaking could occur. Similarly, in the event of a 7.4 magnitude earthquake along the Maacama fault strong to very ground shaking could occur. However, the Proposed Project does not involve habitable structures that would be subject to major structural damage or that would expose people to substantial adverse effects including loss, injury, or death. The project would be constructed to the seismic standards of the most recent California Building Code, as applicable. Therefore, compliance with these design standards would ensure potential impacts related to strong seismic ground shaking would be less than significant.
- a) 3) Less than Significant. The potential for liquefaction in Sonoma County exists primarily in the wetlands areas adjacent to San Pablo Bay; along the Russian and Petaluma Rivers and Santa Rosa and Sonoma Creeks; the Laguna de Santa Rosa and the Santa Rosa Plain. According to the ABAG Liquefaction Susceptibility Map²⁵, the District Lift Station and WWTF are located within an area of very low to low susceptibility and the ALWSZ WWTF is located in an area of low to moderate susceptibility for earthquake-induced liquefaction. In addition, the Proposed Project does not involve habitable structures that would be subject to major structural damage or that would expose people to substantial adverse effects including loss, injury, or death. The project would be constructed to the seismic standards of the most recent California Building Code, as applicable. Therefore, compliance with these design standards would ensure potential impacts related to seismic-related ground failure including liquefaction would be less than significant.

- a) 4) Less than Significant. The Proposed Project areas are not immediately located in landslide hazard areas, as delineated in the County of Sonoma Hazard Mitigation Plan.²⁶ In addition, the facility modifications would be located on relatively flat lands that have been previously developed. According to the ABAG Landslide Hazard Map²⁷, the District Lift Station and WWTF are located in an area with surrounding hillsides that have very few to few landslides and are not located near potential debris flow sources. The ALWSZ is located in an area consisting of surficial deposits and is not located near any potential debris flow sources. Additionally, the Proposed Project does not involve habitable structures that would be subject to major structural damage or that would expose people to substantial adverse effects including loss, injury, or death. Therefore, potential impacts related to landslide hazards would be less than significant.
- b) No Impact. Facility modifications would be installed at existing sanitation facilities on previously developed and disturbed lands consisting of paved areas, hardscape, and ruderal vegetation. BMP 5 and BMPs 8 through 10, which include measures to prevent off-site erosion and the generation of dust, would be followed during facility modifications to prevent soil erosion or the loss of topsoil. The sanitation facilities are located on relatively flat land and minor trenching associated with the installation of the filling and receiving stations should not cause soil erosion or loss of topsoil. Therefore, potential impacts related to soil erosion or loss of topsoil would be less than significant.
- c) No Impact. Please refer to VI a) 3) and VI a) 4) above. Facility modifications would be installed at existing sanitation facilities on relatively flat, previously developed and disturbed lands consisting of paved areas, hardscape, and ruderal vegetation. The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, potential impacts would be less than significant.
- d) No Impact. All Proposed Project modifications would occur at existing sanitation facilities on previously developed and disturbed land including paved areas, hardscape, and ruderal vegetation. The addition of filling and receiving stations at the existing sanitation facilities would not be located on expansive soils that would create substantial risks to life or property.
- e) No Impact. The Proposed Project would not involve the construction of any septic tanks or alternative waste water disposal system.

VII. GREENHOUSE GAS EMISSIONS

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

DISCUSSION OF POTENTIAL IMPACTS

Some gases in the atmosphere affect the Earth's heat balance by absorbing infrared radiation. These gases can prevent the escape of heat in much the same way as glass in a greenhouse. This is often referred to as the "greenhouse effect," and it is responsible for maintaining a habitable climate. On Earth, the gases believed to be most responsible for climate change are water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF₆). Enhancement of the greenhouse effect can occur when concentrations of these gases exceed the natural concentrations in the atmosphere. Of these greenhouse gases (GHG), CO₂ and CH₄ are emitted in the greatest quantities from human activities in the United States.²⁸ Emissions of CO₂ are largely by-products of fossil fuel combustion for energy and transportation, whereas CH₄ primarily results from off-gassing associated with agricultural practices and landfills²⁹. Agricultural soil management is the largest contributor to N₂O emissions³⁰. SF₆ is a GHG commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. SF₆, while comprising a small fraction of the total GHGs emitted annually world-wide, is a very potent GHG with a Global Warming Potential value of 22,800 compared to the Global Warming Potential value of one (1) for CO₂.³¹ There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to climate change, although there is much uncertainty concerning the magnitude and rate of the warming³².

Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of climate change on weather and climate are likely to vary regionally, but according to a report published by the Intergovernmental Panel on Climate Change (IPCC), primary effects are expected to include the following:

1. Higher maximum temperatures and more hot days over nearly all land areas;

2. Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
3. Reduced diurnal temperature range over most land areas;
4. Increase of heat index over land areas; and
5. More intense precipitation events.

In addition, there are several secondary effects that are projected to result from climate change, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term are likely very high³³.

Federal

Supreme Court Ruling of Carbon Dioxide as a Pollutant

The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for implementing the federal Clean Air Act (CAA) and its amendments. The Supreme Court of the United States ruled on April 2, 2007 that CO₂ is an air pollutant as defined under the CAA, and that EPA has the authority to regulate emissions of GHGs. The ruling in this case resulted in EPA taking steps to regulate GHG emissions and lent support for state and local agencies' efforts to reduce GHG emissions.

State

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill (AB) 32 Climate Change Scoping Plan and Update

In December 2008, the California Air Resources Board (ARB) adopted its *Climate Change Scoping Plan*, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) of CO₂-equivalent (CO₂e) emissions, or approximately 21.7 percent from the state's projected 2020 emission level of 545 MMT of CO₂e under a business-as-usual scenario (this is a reduction of 47 MMT CO₂e, or almost 10 percent, from 2008 emissions). CO₂e is a measurement used to

account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. ARB's original 2020 projection was 596 MMT CO₂e, but this revised 2020 projection takes into account the economic downturn that occurred in 2008. The Scoping Plan reapproved by ARB in August 2011 includes the Final Supplement to the Scoping Plan Functional Equivalent Document, which further examined various alternatives to Scoping Plan measures. The Scoping Plan also includes ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory³⁴.

In 2014, ARB adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate the progress that has been made between 2000 and 2012.³⁵ According to the update, California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020.³⁶ The update also reports the trends in GHG emissions from various emission sectors.

Executive Order B-30-15

On April 20, 2015, Governor Edmund G. Brown, Jr., signed Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union which adopted the same target in October 2014. California is on track to meet or exceed its legislated target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, summarized above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2°Celsius, the warming threshold at which there will likely be major climate disruptions such as super droughts and rising sea levels. None of the targets stated in Executive Order B-30-15 have been adopted by the state legislature.

Regional and Local

Northern Sonoma County Air Pollution Control District

The Northern Sonoma County APCD was established by the State of California legislature in 1972 to prevent the emission of air pollution from stationary sources that may be detrimental to the health, safety, and welfare of the people in the Northern Sonoma County APCD. Rules and regulations are enacted by the Board of Directors for this District, the members of the Sonoma County Board of Supervisors, and enforced by

the District. The Northern Sonoma County APCD regulates air quality within the portion of northern Sonoma County that falls within the NCAB.³⁷

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) periodically publishes CEQA Guidelines to help local jurisdictions and lead agencies comply with the requirements of CEQA regarding potentially adverse impacts to air quality. These CEQA Guidelines were updated in June 2010 to include new thresholds of significance (2010 Thresholds)³⁸. The BAAQMD's CEQA Guidelines were further updated in May 2017 to address the California Supreme Court's 2015 opinion in *California Building Industry Association vs. Bay Area Air Quality Management District*, 62 Cal.4th 369³⁹.

While the BAAQMD Guidelines do not provide construction thresholds of significance for GHG emissions, the 2017 GHG thresholds of significance contain the following operational thresholds:

- Compliance with a Qualified GHG Reduction Strategy; or
- 1,100 metric tons (MT) of CO₂e per year; or
- 4.6 MT CO₂e per service population (residents plus employees) per year.

The BAAQMD Guidelines also state that the BAAQMD encourages local governments to adopt a qualified GHG Reduction Strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG Reduction Strategy that meets certain standards as defined in the Guidelines, it can be presumed that the project will not have significant GHG emission impacts. This approach is consistent with the State CEQA Guidelines, Section 15183.5.

However, there is no adopted GHG Reduction Strategy that is applicable to the project area. As a result, this analysis uses the BAAQMD's 2017 CEQA Guidelines to determine significance of project-related GHG emissions. BAAQMD does not have thresholds of significance for construction-related GHG emissions, but requires quantification and disclosure of construction-related GHG emissions. GHG emissions from construction activities are short term. One-time, short-term emissions can be converted to average annual emissions by amortizing them over the service life of the project.

Sonoma County Regional Climate Action Plan

On July 11, 2016, the Regional Climate Protection Authority (RCPA) adopted the Sonoma County Regional Climate Action Plan: 'Climate Action 2020 and Beyond' (CAP).⁴⁰ The regional framework creates an efficient and consistent approach to address climate change but allows local governments to adopt locally appropriate measures to reduce GHG emissions⁴¹.

However, the EIR for the CAP was successfully challenged and overturned in court in July 2017. Currently the RCPA has no plans to challenge the court decision and local jurisdictions cannot formally adopt the CAP, but can rely on it as a guidance document for measures to reduce GHG emissions.⁴²

Sonoma County General Plan 2020

The Sonoma County General Plan 2020 does not contain any goals or policies related to GHG emissions relevant to the Proposed Project.⁴³

- a) No Impact. The NSCAPCD currently does not have adopted GHG thresholds of significance for CEQA review projects. Therefore, to determine impacts associated with GHG emissions, the NSCAPCD recommends use of the BAAQMD's approach to the determination of significance of GHG emissions based on the BAAQMD's 2017 Air Quality Guidelines operational significance threshold of 1,100 metric tons (MT) carbon dioxide equivalent (CO₂e) per year for projects that are not stationary sources⁴⁴. There are no adopted thresholds for construction emissions, however, and the NSCAPCD recommends a case-by-case consideration of construction GHG emissions and encourages lead agencies to incorporate BMPs to reduce GHG emissions during construction. This impact analysis estimates GHG emissions that would be emitted during project construction and then compares them to BAAQMD's 2017 Guidelines operational significance thresholds. Since there are no construction-related thresholds to apply, construction-related emissions are treated as operational emissions and averaged over a conservative 25-year lifetime of the project and then compared to BAAQMD's operational threshold of 1,100 MT CO₂e per year (Table 8).

In order to estimate GHG emissions, the default emission factors consistent with the Climate Registry Protocol Version 2.1 were used⁴⁵. Construction and operation (including maintenance) of the Proposed Project would result in GHG emissions at the District and ALWSZ, but would also eliminate GHG emissions relating to the treatment and disposal of wastewater at the District WWTF and therefore, the electricity consumed.

Construction of the Proposed Project would result in a total GHG emission of 0.35 MT CO₂e. Operation of the Proposed Project would result in the emission of 271 MT CO₂e each year associated with the transportation of wastewater to the ALWSZ WWTF. However, the ALWSZ is a more energy efficient sanitation system and as a result would reduce GHG emissions by 2.7 MT CO₂e per year associated with the treatment, storage, and disposal of wastewater compared to the District. From 2011 through 2015, for example, the ALWSZ used approximately 2,992 kilowatt hours of electricity per million gallons of wastewater (kWh/MG) treated, stored, and disposed of compared to approximately 16,660 kWh/MG at the District.⁴⁶ Therefore, the Proposed

Project would result in a net increase of approximately 268 MT CO₂e per year in operation-related emissions as listed below in Table 8. Maintenance activities for the Proposed Project would remain consistent with existing ongoing maintenance activities at the sanitation facilities. As such, GHG emissions from maintenance activities of the treatment facilities would be similar to, but smaller in scale than, construction-related emissions.

Table 8. Project-related Greenhouse Gas (GHG) Emissions Compared to Bay Area Air Quality Management District (BAAQMD) Proposed California Environmental Quality Act (CEQA) Thresholds for Greenhouse Gases (GHGs).

	BAAQMD Operational Threshold (MT CO₂e/year)*	Estimated Total Construction- related GHG Emissions (MT CO₂e)	Estimated Annual Operation-related GHG Emissions (MT CO₂e/year)
Greenhouse Gases (GHGs) - Projects other than stationary sources	1,100*	0.35	268

*No construction-related emissions threshold has been proposed. Therefore, the operational-related emissions threshold of 1,100 metric tons (MT) of carbon dioxide equivalent per year (CO₂e/yr.) is used. Source: Bay Area Air Quality Management District. 2017. CEQA Guidelines. May 2017. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed September 5, 2017.

Construction, operation, and maintenance-related GHG emissions fall well below BAAQMD's 2017 Guidelines operational significance threshold of 1,100 MT CO₂e per year for projects that are not stationary sources. Therefore the Proposed Project would have no impact on climate change, or generate GHG emissions either directly or indirectly that would have a significant effect on the environment.

- b) Less than Significant. The Proposed Project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG. The County of Sonoma does not currently have an adopted plan to reduce GHG emissions. However, the Proposed Project would be consistent with the BAAQMD 2017 Clean Air Plan (2017 CAP) and AB32. The 2017 CAP contains 35 control measures aimed at reducing GHG emissions in the Bay Area.⁴⁷ The 2017 CAP has two GHG measures applicable to operation of WWTPs: WR1 (Limit GHGs from POTWs [Publicly-Owned Treatment Works]) and WR2 (Support Water Conservation). Since the Proposed Project would not affect the existing production of recycled water at the facility or result in a substantial increase in GHG emissions, the Proposed Project would not conflict with the implementation of the GHG reduction measures found in 2017 CAP.

While the Proposed Project would increase the overall greenhouse gas emissions related to the treatment of wastewater, the emissions do not exceed the significance threshold presented by the BAAQMD. The BAAQMD GHG thresholds were designed to meet the AB32 goal of reducing GHG emissions to 1990 levels by 2020. As discussed under item a), the Proposed Project would not result in any temporary or new permanent sources of GHG emissions that would exceed the BAAQMD's 1,100 metric tons per year CO₂e significance threshold. Since the BAAQMD GHG significance threshold would not be exceeded, the Proposed Project would not impair the State's ability to implement AB 32. This impact would be less than significant.

VIII. HAZARDS AND HAZARDOUS MATERIALS

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

DISCUSSION OF POTENTIAL IMPACTS

- a) Less than Significant. The Proposed Project would require the temporary transport of construction equipment and construction materials, and routine transport of vehicles

that use hazardous materials (e.g. motor oil, gasoline). Construction of the facility modifications at the District Lift Station would require the removal of approximately 10 cubic feet of concrete that contains asbestos. To avoid potential impacts, construction activities would incorporate the use of BMP 11 and BMP 12, as defined in project plans and specifications (Table 1). BMP 11 and BMP 12 would ensure that the removal and disposal of hazardous materials, including asbestos, would be done in compliance with all Division of Occupational Safety & Health (DOSH), also known as Cal/OSHA, requirements and applicable hazardous waste containment, handling, and disposal laws (as identified in the District's Standard Contract Documents). All hazardous materials would be disposed of at a properly licensed disposal facility. The District's wastewater is not considered hazardous waste according to the California Department of Toxic Substances Control and as codified in the California Code of Regulations (Title 22, Division 4.5, Chapter 11 Identification and Listing of Hazardous Waste). Therefore, the Proposed Project would not create a significant hazard to the public or environment.

- b) Less than Significant. Construction, operation, and maintenance of the Proposed Project would require the use of vehicles and equipment that may have a slight potential for accidentally spilling oil or fuel. In addition, the removal and transport of concrete containing asbestos could result in the accidental release of fugitive dust containing asbestos. Accidental release of any hazardous materials (e.g. motor oil, gasoline, or asbestos) would not create a significant hazard to the public or environment because the quantity and toxicity of materials that could be released would be low, and BMP 13 would be employed to prevent an accidental release or spill from occurring and containing an accidental release or spill if it did occur. The project specifications would require all contractors and District employees to comply with the District's Standard Contract Documents and Proposed Project BMP 13 to protect the project areas and public roadways from being contaminated by the accidental release of any hazardous materials and/or wastes during construction, operation, or maintenance activities. The construction contractor would contact the local fire agency and the Sonoma County Department of Environmental Health for any site-specific requirements regarding hazardous materials or hazardous waste containment or handling. Project specifications would also require the construction contractor to prepare a Safety Plan in accordance with the District's Standard Contract Documents. If hazardous materials are encountered during construction activities, the contractor would be required to halt construction immediately and notify the District's Construction Inspection Section. Disposal of all hazardous materials would be in compliance with all applicable hazardous waste disposal laws. District staff and waste hauling contractors would follow the safety plan already in place for maintenance, operations, and transportation of wastewater at the existing sanitation facilities.

Disposal of all hazardous materials would be in compliance with all current hazardous waste disposal laws. Therefore, construction, operation, and maintenance of the Proposed Project, including the transportation of wastewater, would not create a significant hazard to the public or environment.

- c) No Impact. The Proposed Project locations at the District WWTF and Lift Station are not located within one-quarter mile of an existing or proposed school. The ALWSZ WWTF is located within one-quarter mile of the driving course at the Santa Rosa Junior College Public Safety Training Center; however the likelihood of the project to emit hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste would be limited to gasoline or oil used during the transport of wastewater and the maintenance of the transport vehicles. Please refer to item VIII. b) for a list of standard procedures and BMPs that will be followed to prevent and contain the accidental release of any hazardous materials, substances, or wastes.
- d) No Impact. A Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) public access database search revealed no Superfund sites within the Proposed Project areas⁴⁸. A database search of the GeoTracker (State Water Resources Control Board) site did not identify any Cleanup Sites within the Proposed Project areas⁴⁹.
- e) No Impact. The District WWTF and Lift Station are not located within an airport land use plan or within two miles of a public airport or public use airport. Although the ALWSZ WWTF is located within two miles of a public airport, the modifications proposed for the existing facilities are minor in scale, and routine vehicle transportation associated with the Proposed Project would not result in a safety hazard for people residing or working in the project area.
- f) No Impact. The Proposed Project is not located in the vicinity of a private air strip.
- g) No Impact. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No construction work would occur in a public roadway that would affect the movement of emergency response vehicles or evacuation efforts. Truck drivers would be properly licensed to transport municipal waste and will follow all applicable traffic laws including yielding to emergency traffic when necessary.
- h) No Impact. The Proposed Project locations at the District WWTF and Lift Station are located in an area of mixed agricultural, commercial, and residential uses adjacent to wildlands. The ALWSZ is located in a predominantly developed industrial and

commercial business park and adjacent to the Charles M. Schulz-Sonoma County Airport and is in the vicinity of riparian vegetation and agricultural grasslands. The Sonoma County General Plan 2020 identifies the District WWTF and District Lift Station as being located in areas of moderate wild land fire hazard⁵⁰. The Sonoma County General Plan 2020 identifies the ALWSZ WWTF as being located in an area with low to no wild land fire hazard with a moderate wild land fire hazard identified for adjacent riparian habitat⁵¹. However, the Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires beyond the risks that currently exist in the vicinity of the Proposed Project areas.

IX. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project would not violate any water quality standards or waste discharge requirements. The Proposed Project would provide a benefit to water quality by eliminating the discharge and storage of secondary-treated effluent into Graham's Pond (considered waters of the U.S.) for recycled water irrigation during the dry season, and direct discharge to Dutch Bill Creek during the wet season to address repeated violations of the waste discharge requirements associated with the District's NPDES permit. Instead, all wastewater at the ALWSZ WWTF would be treated to a secondary or tertiary level and discharged as recycled water irrigation.
- b) No Impact. The Proposed Project will not deplete groundwater supplies or interfere substantially with groundwater recharge.
- c) No Impact. The Proposed Project will not substantially alter existing drainage patterns of the sites or areas, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on- or off-site. All Proposed Project modifications would occur on previously developed and disturbed lands including paved and hardscape areas and ruderal non-native vegetated areas. The footprint of the area to be paved at the ALWSZ receiving station would be minor in size and would include curbing and drainage to guide all surface runoff into the sewer collection system and would not result in substantial erosion or siltation on- or off-site.
- d) No Impact. The Proposed Project will not substantially alter existing drainage patterns of the sites or areas, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. All Proposed Project modifications would occur on previously developed and disturbed lands including paved and hardscape areas and ruderal non-native vegetated areas. The footprint of the area to be paved at the ALWSZ receiving station would be minor in size and would include curbing and drainage to guide surface runoff into the sewer collection system and would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- e) No Impact. The Proposed Project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- f) No Impact. The Proposed Project would improve water quality by improving the level of treatment of the wastewater from secondary-treatment at the District WWTF to tertiary-treatment at the ALWSZ WWTF and end current violations of the District's waste discharge requirements.

- g) No Impact. The Proposed Project would not include the construction of housing.
- h) No Impact. The District WWTF, District Lift Station, and ALWSZ WWTF are not located within a 100-year flood hazard zone as identified in the Sonoma County General Plan 2020.⁵² Therefore, the Proposed Project modifications would not place a structure within the flood hazard zone that would impede or redirect flood flows.
- i) No Impact. The Proposed Project would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- j) No Impact. The Proposed Project locations are not located in areas subject to inundation by seiche, tsunami, or mudflow.

X. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project would not physically divide or otherwise alter an established community.
- b) No Impact. Current land use designations at the existing sanitation facilities are Rural Residential and Public/Quasi-Public as defined in the Sonoma County General Plan 2020. The Proposed Project will not conflict with any current land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating and environmental effect.
- c) No Impact. The Proposed Project does not conflict with any applicable habitat conservation plan or natural community conservation plan.

XI. MINERAL RESOURCES

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

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. No known mineral resources occur in the project areas. All project modifications will be conducted within previously developed and disturbed areas. The Proposed Project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- b) No Impact. The Proposed Project would not result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. All Proposed Project modifications would occur on previously developed lands designated as Rural Residential and Public/Quasi-Public as identified in the Sonoma County General Plan 2020⁵³.

XII. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) Less than Significant. Construction of the Proposed Project would result in a temporary increase in noise associated with construction activities. The Proposed Project includes BMP 2 and BMP 3 to avoid the potential for significant noise impacts (Table 1). These BMPs include: construction activities would only take place between the hours of 7:00am and 5:00pm, Monday through Friday; equipment and trucks used for project construction would utilize the best available noise control techniques (e.g., improved mufflers, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible); and all machinery and equipment would be inspected to see if there are any problems which may contribute to increased noise levels and unsafe practices. For a complete list of BMPs addressing potential noise impacts please refer to Table 1.

There are residences near the project sites that could be exposed to increased noise levels during construction activities. Construction activities at the District WWTF may be audible to adjacent land owners and vehicle and pedestrian traffic on Lu Dan Road. Construction activities at the District Lift Station may be also be audible to a land owner located across Dutch Bill Creek and within 100 feet of the proposed modifications, as well as to vehicle and pedestrian traffic on Occidental-Camp Meeker Road. Facility modifications may have temporary noise impacts to these sensitive receptors. However, incorporation of BMP 2 and BMP 3 during construction activities would avoid potential significant noise impacts.

Operation and maintenance of the proposed facility modifications would be similar to existing facility operations and maintenance and would not alter the ambient noise as it currently exists. Operations associated with the transportation of wastewater would be similar to existing facility operations but would be more frequent, with an average of five (5) daily trips being generated between the District Lift Station and the ALWSZ WWTF during the dry season. Up to ten (10) additional daily trips, for a maximum of up to fifteen (15) daily trips, would also occur from the District Lift Station and District WWTF to the ALWSZ WWTF during heavy rainfall events in the wet season, when wastewater flows increase to the District. However, vehicle traffic at the sanitation facilities would be intermittent and last approximately 20 minutes each trip and would not increase the ambient noise levels above those that already exist at the facilities and on the surrounding roadways. In addition, incorporation of the BMPs listed above, including only operating trucks between the hours of 7:00am and 5:00pm, Monday through Friday, would further reduce noise-generated impacts from the transportation of wastewater. Therefore, impacts associated with the generation of noise from construction, operation, and maintenance activities would be less than significant.

- b) Less than Significant. The Proposed Project would not generate excessive groundborne vibrations or groundborne noise levels. Please refer to Item XII a).
- c) No Impact. The Proposed Project would not create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Please refer to Item XII a).
- d) Less than Significant. Transporting wastewater would create an intermittent noise source of short duration at the existing sanitation facilities that would not result in a substantial temporary or periodic increase in ambient noise levels above levels existing without the project. Please refer to Item XII a).
- e) No Impact. The Proposed Project would not expose people residing or working in the project area to excessive noise levels. Although the ALWSZ WWTF is located adjacent to the Charles L. Schulz-Sonoma County Airport, the Proposed Project would not include the construction of any new homes or work locations. In addition, the

project does not include any components that would result in placing new sensitive receptors in the project area. Please refer to Item XII a).

- f) No Impact. The Proposed Project is not located within the vicinity of a private airstrip.

XIII. POPULATION AND HOUSING

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

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project would not construct facilities that would directly or indirectly induce substantial population growth. The Proposed Project would not increase wastewater treatment capacities above existing conditions. The District would utilize existing treatment capacity available at the ALWSZ WWTF to come into compliance with NPDES regulations.
- b) No Impact. The Proposed Project would not displace housing because no homes exist within the Proposed Project locations.
- c) No Impact. The Proposed Project would not displace people because there are no inhabitants within the Proposed Project locations.

XIV. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project would not require alteration of existing or construction of new government facilities or result in the need for new or physically altered governmental facilities, including for fire and police protection, schools, parks, or other public facilities. The Proposed Project requires modification of existing facilities at the District's WWTF, District Lift Station, and the ALWSZ WWTF, but these modifications would not result in substantial adverse physical impacts and they would not cause impacts that would impact the facilities' performance objectives.

XV. RECREATION

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

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project does not include the use of existing parks or other recreational facilities.
- b) No Impact. The Proposed Project does not include or require the construction or expansion of recreational facilities.

XVI. TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. Construction and maintenance activities would occur outside of public roadways at existing sanitation district facilities and property and would not conflict with applicable plans, ordinances, or policies that establish measures of effectiveness for the performance of the circulation system. Construction and wastewater transport vehicles may cause a short-term delay of traffic as vehicles enter and exit the sanitation facilities. However, construction traffic would be infrequent and generally

limited to accessing the sites in the morning and exiting the sites in the afternoon and would not be at a level or frequency that would conflict with applicable plans, ordinances, or policies that establish measures of effectiveness for the performance of the circulation system. In addition, traffic control would be implemented by the construction contractor if necessary to allow the passage of vehicles during construction activities.

Vehicle traffic associated with the transport of wastewater would average under ten (10) round-trip vehicle trips a day (Monday through Friday) over the course of a year, with a maximum of up to fifteen (15) trips a day during heavy rainfall events. Vehicle trips would occur primarily between the District Lift Station and the ALWSZ WWTF (Figure 3).

Vehicles would travel south on Occidental-Camp Meeker Road from the District Lift Station to Bohemian Highway, then travel south on Bohemian Highway to Graton Road and then east on Graton Road to Highway 116. Occidental-Camp Meeker Road is designated as a local road as identified by the Sonoma County Department of Transportation and Public Works⁵⁴. Bohemian Highway is designated as a Rural Major Collector Roadway⁵⁵. Graton Road is designated as a Rural Major Collector Roadway and an Urban Major Collector Roadway through the town of Graton⁵⁶.

Vehicles would continue north on Highway 116 to Guerneville Road or turn north on Vine Hill Road to Guerneville Road. Highway 116 is designated as a Rural Principal Arterial Roadway and Vine Hill Road is designated as a Rural Major Collector Roadway⁵⁷. Vehicles would then travel east on Guerneville Road, to either Olivet Road or Fulton Road.

If using Olivet Road, vehicles would travel north to River Road, west on River Road to Slusser Road, north on Slusser Road to Laughlin Road, east on Laughlin Road to Skylane Boulevard, and north on Skylane Boulevard to Aviation Boulevard. Guerneville Road and River Road are designated as Rural Principal Arterial Roadways; Olivet Road, Slusser Road, and Laughlin Road are designated as Rural Major Collector Roadways; and Skylane Boulevard is designated as an Urban Minor Arterial Roadway as identified in the Sonoma County General Plan 2020⁵⁸. Aviation Boulevard is designated as a local road as identified by the Sonoma County Department of Transportation and Public Works⁵⁹.

Vehicles may also travel east on either Guerneville Road or River Road to Fulton Road and north on Fulton Road to Airport Boulevard, then west on Airport Boulevard to Skylane Boulevard, then north on Skylane Boulevard to Aviation Boulevard. Fulton Road is designated as an Urban Principal Arterial and Rural Principal Arterial Roadway, and Airport Boulevard is designated as an Urban Principal Arterial and Urban Minor Arterial Roadway⁶⁰.

During heavy rainfall events when inflow to the District Lift Station exceeds storage capacity at the Lift Station and wastewater is stored at the District WWTF, vehicles transporting wastewater from the District WWTF would travel west on Occidental Road to Bohemian Highway and north to Graton Road. Occidental Road is designated as a rural Major Collector Roadway⁶¹. Vehicles would then utilize the same routes to return to the District Lift Station and WWTF.

With a maximum of fifteen (15) daily vehicle trips, and an average of less than ten (10) daily vehicle trips on an annual basis, it is not anticipated that the number of daily vehicle trips would substantially increase traffic or cause traffic congestion in relation to the design and capacity of the roads that would conflict with applicable plans, ordinances, or policies that establish measures of effectiveness for the performance of the circulation system.

- b) No Impact. Construction and municipal waste transportation vehicle traffic would not conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. There are no roadways that will be used for the Proposed Project that have designated Level of Service (LOS) objectives as identified in the Sonoma County General Plan 2020⁶². Please refer to item XVI a) for an additional discussion of vehicle trips and roadways associated with the Proposed Project.
- c) No Impact. The Proposed Project does not include air transportation and would not affect air traffic patterns.
- d) No Impact. The Proposed Project would not change any road design or cause any road obstructions.
- e) No Impact. The Proposed Project sites would be accessed by the same roads as the existing facilities and would be accessible to emergency vehicles.
- f) No Impact. The Proposed Project would not conflict with alternative transportation policies, plans, or programs. The Proposed Project modifications would be located at existing sanitation facilities, where there is adequate room to stage construction and municipal waste transportation vehicles, including equipment and materials. No off-site parking would be necessary.

XVII. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Listed as eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code section 5010.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

Tom Origer and Associates conducted an archival records search for the Proposed Project locations and submitted summaries of the results and recommendations on 11 August 2017 (Appendix B). The archival records search identified two previously known tribal cultural resource sites, CA-SON-1323 and CA-SON-1324 that have been recorded within the ALWSZ study area (Appendix B). The Proposed Project modifications at the ALWSZ WWTF are at least 1,000 feet away from CA-SON-1323 and CA-SON-1324, and no Proposed Project activities would occur on these sites. There are seven additional resources recorded within a half-mile of the study area. However, no project activities would occur on these sites.

- a) No Impact. The Proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed as eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resource Code section 5010.1(k). However, excavation during project construction has the potential to expose and affect subsurface cultural resources that were not visible or identified during the archival

records search for the project. To further minimize and avoid potential impacts to unknown cultural resources, construction activities would incorporate the use of BMPs, as defined in project plans and specifications (Table 1). For example, prior to initiation of ground-disturbing activities, BMP 7 would require the District to provide training for construction crews about the kinds of cultural materials that could be present at the project site and the protocols to be followed should any such materials be uncovered during construction. Training shall be conducted by an archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61). BMP 7 would also require the contractor to comply with the District's Standard Contract Documents regarding the accidental discovery of cultural resources. The project specifications would provide that if discovery is made of items of historical, archaeological or paleontological interest, the contractor would immediately cease all work activities in the area of discovery. The contractor would not resume work until authorization is received from the Construction Inspector. The project specifications would require the contractor to comply with Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, pertaining to the discovery of human remains. These practices and procedures protect cultural resources by avoiding or minimizing potential adverse impacts during construction activities.

- b) No Impact. The Proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Please refer to Item XVII a).

XVIII. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project would not require or result in the construction or expansion of new water or wastewater treatment facilities⁶³.
- b) Beneficial Impact. The Proposed Project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. The objective of the Proposed Project is to bring to District into compliance with WDR Order R1-2012-0101 and CDO R1-2012-0102 by eliminating the discharge of secondary-treated wastewater from the District WWTF into Graham's Pond and Dutch Bill Creek. The District proposes to accomplish this by transporting untreated wastewater to the

ALWSZ WWTF and utilizing the existing treatment, storage, and disposal capacity available at the ALWSZ WWTF. The ALWSZ currently treats wastewater to a secondary and tertiary-level and all of the treated wastewater is used for recycled water irrigation and is not discharged to any surface waters. Therefore, the transfer of treatment, storage, and disposal of the District's wastewater to the ALWSZ will be a beneficial impact that eliminates the current discharge of secondary-treated wastewater into the headwaters of Dutch Bill Creek.

- c) No Impact. Please refer to the above Item XVII b). The Proposed Project would utilize existing and available treatment, storage, and disposal capacity at the ALWSZ WWTF⁶⁴.
- d) No Impact. The Proposed Project would not require substantial additional water supplies. In addition, sufficient water supplies are available to serve the Proposed Project from existing entitlements and resources from the Occidental Community Services District that currently serves the District facilities and the Town of Windsor that currently serves the ALWSZ WWTF.
- e) No Impact. The Proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities which could cause significant environmental effects.
- f) Less than Significant. The Proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. Construction of the proposed modifications would result in a minor amount of debris including but not limited to form lumber, old asphalt, and garbage. However, the construction contractor would be required to develop a Waste Management Plan that would emphasize waste reduction and recycling as well as identify a suitable disposal location for waste that cannot be recycled. Construction would also include the removal and disposal of approximately 10 cubic feet of concrete containing asbestos. However, the contractor would incorporate BMPs during construction activities, including the handling and disposal of hazardous wastes at a properly licensed facility. Operation of the Proposed Project would continue to result in the creation of biosolids that would periodically be disposed of according to the permit requirements for each respective sanitation facility. The District and ALWSZ currently dewater biosolids and dispose of it at the Sonoma County Central Landfill. Operation of the Proposed Project would continue to utilize these permitted disposal methods for biosolids, therefore this impact would be less than significant.
- g) No Impact. The Proposed Project would be served by properly licensed landfills with sufficient permitted capacity to accommodate the project's solid and hazardous waste disposal needs. Please refer to Item XVII f). The Proposed Project would require the disposal of a minor amount of construction-related debris, including a minor amount of concrete containing asbestos. In addition, the existing operation and maintenance

of solid waste disposal at the ALWSZ would continue to follow permit requirements including disposal of biosolids at the Sonoma County Central Landfill. The Proposed Project would continue with this service.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

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

DISCUSSION OF POTENTIAL IMPACTS

- a) No Impact. The Proposed Project would involve minor modifications to existing sanitation facilities on previously developed and disturbed lands and the transportation of wastewater on existing roadways. All potential impacts associated with the Proposed Project have been fully identified in this document. The Proposed Project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or pre-history.

- b) No Impact. The potential for project-generated impacts to contribute to a significant cumulative impact would arise if they are located within the same geographic area. However, the geographic areas associated with the construction of the Proposed Project would generally be limited to the construction locations. Potential localized impacts such as noise, aesthetics, and traffic would potentially be worsened if other projects with similar effects were occurring within the adjacent area.

In addition to geographic scope, cumulative impacts are determined by timing of the other projects relative to the Proposed Project. For a group of projects to generate cumulative construction-related impacts, they must occur close together in time as well as location.

For a group of projects to generate cumulative operations and maintenance-related impacts, they also must occur close together in time as well as location. Cumulative operations and maintenance-related impacts associated with the ongoing transportation of wastewater could occur if the project were to contribute to a decrease in the Level of Service ratings for the roads being traveled on.

In order to identify potential related projects that could combine with the Occidental County Sanitation District Wastewater Transport Compliance Project to result in cumulative impacts, Water Agency staff consulted with and researched the websites of PRMD, the County of Sonoma Transportation and Public Works Department (TPW), and Caltrans. The Sonoma County General Plan was also consulted for specific regional trends and projections.

Results of the analysis determined that there is no cumulative impact anticipated. All impacts associated with the Proposed Project have been fully identified in this document. No impacts have been identified that could be cumulatively considerable, and no mitigation is required.

- c) No Impact. The Proposed Project does not have environmental effects that would cause substantial adverse effects on human beings.

DETERMINATION

On the basis of this initial evaluation:

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

Signature: _____

Mike Thompson - General Manager

Date: _____

9/28/12

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³⁵ ARB. 2014. First Update to the AB 32 Scoping Plan. California Air Resources Board. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed September 5, 2017.

³⁶ Ibid.

³⁷ County of Sonoma. n.d. Northern Sonoma County Air Pollution Control District (NSCPACD). <http://sonomacounty.ca.gov/Air-Quality/>. Accessed September 5, 2017.

³⁸ Bay Area Air Quality Management District. 2010. California Environmental Quality Act, Air Quality Guidelines. May 2010. http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/Draft_BAAQMD_CEQA_Guidelines_May_2010_Final.ashx. Accessed September 5, 2017.

³⁹ Bay Area Air Quality Management District. 2017. CEQA Guidelines. May 2017. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed September 5, 2017.

⁴⁰ Sonoma County Regional Climate Protection Authority. 2017. Climate Action 2020 and Beyond. <http://rcpa.ca.gov/projects/climate-action-2020/>. Last accessed September 25, 2017.

⁴¹ Ibid.

⁴² Sonoma County Regional Climate Protection Authority. 2017. Climate Action 2020 and Beyond. <http://rcpa.ca.gov/projects/climate-action-2020/>. Twitter Feed: Agency won't appeal successful legal challenge of Sonoma County climate action plan. Last accessed September 25, 2017.

⁴³ County of Sonoma Permit and Resources Management Department (PRMD). 2008. Sonoma County General Plan 2020. Adopted on September 23, 2008, amended on August 24, 2010. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Last accessed September 5, 2017.

⁴⁴ Bay Area Air Quality Management District. 2017. CEQA Guidelines. May 2017. <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed September 5, 2017.

⁴⁵ The Climate Registry. General Reporting Protocol for the Voluntary Reporting Program. Version 2.1. Tables 13.1 and 13.3. January 2016. <https://www.theclimateregistry.org/tools-resources/reporting-protocols/general-reporting-protocol/>. Accessed December 5, 2016.

⁴⁶ Roberts, Dale. Sonoma County Water Agency Principal Engineer, Engineering and Resource Planning Division. May 31, 2017. Email communication with Jeff Church, Sonoma County Water Agency Senior Environmental Specialist, regarding energy consumption and greenhouse gas emissions at OCSD and ALWSZ.

⁴⁷ Bay Area Air Quality Management District. 2017. Spare the Air. Cool the Climate. A blueprint for clean air and climate protection in the Bay Area. Final 2017 Clean Air Plan. Adopted April 19, 2017. http://www.baagmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed September 25, 2017.

⁴⁸ USEPA. CERCLIS Search. <http://www.epa.gov/enviro/cerclis-search>. Accessed September 5, 2017.

⁴⁹ SWRCB. GeoTracker. <http://geotracker.waterboards.ca.gov/>. Accessed September 5, 2017.

⁵⁰ County of Sonoma Permit and Resources Management Department (PRMD). 2008. Sonoma County General Plan 2020, Public Safety Element. Wildland Fire Hazard Areas, Figure PS-1g. Adopted on September 23, 2008, amended on August 24, 2010. <http://www.sonoma-county.org/prmd/gp2020/fig-ps1g.pdf>. Last accessed September 5, 2017.

⁵¹ Ibid.

⁵² County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Public Safety Element. Flood Hazard Areas, Figure PS-1e. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁵³ County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Land Use Plan Maps: Sonoma Coast/Gualala Basin, Figure LU-2a; and Santa Rosa and Environs, Figure LU-2e. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁵⁴ County of Sonoma Transportation and Public Works. Roads, Data and Resources, Functional Classification. <http://sonomacounty.ca.gov/TPW/Roads/Services/Data-and-Resources/Functional-Classification/>. Accessed September 5, 2017.

⁵⁵ County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Roadway Classifications: Russian River Area, Figure CT-4d. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁵⁶ County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Roadway Classifications: Russian River Area, Figure CT-4f. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁵⁷ Ibid.

⁵⁸ County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Roadway Classifications: Santa Rosa and Environs, Figure CT-4e. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁵⁹ County of Sonoma Transportation and Public Works. Roads, Data and Resources, Functional Classification. <http://sonomacounty.ca.gov/TPW/Roads/Services/Data-and-Resources/Functional-Classification/>. Accessed September 5, 2017.

⁶⁰ County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Roadway Classifications: Santa Rosa and Environs, Figure CT-4e. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁶¹ County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Roadway Classifications: Sebastopol and Environs, Figure CT-4f. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁶² County of Sonoma Permit and Resources Management Department. Sonoma County General Plan 2020. Level of Service (LOS) Objectives, Figure CT-3. <http://www.sonoma-county.org/prmd/gp2020/index.htm>. Accessed September 5, 2017.

⁶³ Sonoma County Water Agency. 2017. Memorandum. Airport Larkfield Wikiup Sanitation Zone – Capacity Adequacy to accept Occidental County Sanitation District wastewater flows. August 25, 2017.

⁶⁴ Ibid.

APPENDICES

APPENDIX A

Notice of Preparation and Scoping Comments



Notice of Preparation of Initial Study

May 26, 2017

TO: State Clearinghouse
Responsible and Trustee Agencies
Interested Agencies and Parties

FROM: Occidental County Sanitation District
c/o Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403

Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project

The Occidental County Sanitation District (District) is preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. An Initial Study is a preliminary analysis of a project's potential environmental impacts used to determine whether a Negative Declaration or an Environmental Impact Report will be prepared. It is a public document that analyzes the potential environmental effects related to construction, operation, and maintenance of a project and describes ways to reduce or avoid possible environmental impacts. The District will act as the Lead Agency pursuant to CEQA, and will consider all comments received in response to this Notice of Preparation (NOP), including comments from responsible and trustee agencies, and interested parties regarding the scope and content of the information to be included in the Initial Study.

Background

The District's service area covers approximately 55 acres and provides service to 118 parcels in the community of Occidental in Sonoma County, California. The District collects wastewater in its service area through 7,500 feet of gravity sewer pipelines and one lift station (Figure 1). Secondary treatment is provided at the District WWTF prior to discharge to Dutch Bill Creek or use as recycled water for irrigation. The District has utilized Graham's Pond, located on the Loades property at 5502 Graton Road and originally constructed as an agricultural pond, as a year-round, secondary-treated effluent storage reservoir since 1977.

The District's WWTF is permitted by the Regional Board under the Waste Discharge Requirements (WDRs) adopted in Order No. R1-2012-0101 (Order), dated December 6, 2012, which serves as the

District's current National Pollutant Discharge Elimination System (NPDES) Permit No. CA0023051. The five-year term of the WDRs began February 1, 2013.

The Order implements provisions of the *Water Quality Control Plan for the North Coast Region* (Basin Plan), whereby no WWTF is allowed to discharge waste to the Russian River or its tributaries from 15 May to 30 September and requires advanced (tertiary-level) wastewater treatment for discharges to surface waters from 1 October to 14 May. Since Graham's Pond, located at the head waters of Dutch Bill Creek, is considered a water of the United States subject to NPDES permit requirements and a tributary to the Russian River, it is not permissible to discharge secondary-treated effluent into the pond. However, because Graham's Pond is the only storage pond currently available to the District, the District continues to discharge secondary-treated effluent into the pond year-round.

The Regional Board adopted Cease and Desist Order (CDO) No. R1-2012-0102 on 6 December 2012, which included provisions of the Basin Plan that require advanced wastewater treatment for discharges to surface waters. To remedy the problem of discharging secondary-treated effluent to Graham's Pond in the summer and Dutch Bill Creek in the winter, the CDO requires the District to complete a capital improvement project and achieve full compliance with the CDO and all applicable WDRs by January 31, 2018.

The District released a NOP on 8 December 2014 for a proposed project that identified two (2) potential alternatives to upgrade the existing treatment facilities to tertiary-level standards and construct a recycled water pipeline to a storage pond that would be located on private property. The NOP also discussed the option of trucking untreated wastewater to another sanitation facility for treatment, storage, and disposal. The District held a public scoping meeting on 8 January 2015. Comments received during the scoping period expressed concerns about the proposed treatment upgrade alternatives including: the location and safety of the recycled water storage pond; potential impacts to groundwater and surface water from the storage and irrigation of recycled water; costs and locations for treatment facility upgrades; property encroachment; and impacts to roadways from installation of the pipeline.

Following an engineering feasibility and cost analysis, it was determined that the construction, operation, and maintenance costs associated with treatment upgrade alternatives were not economically feasible for the small base of District ratepayers. Furthermore, the District did not qualify for grants that would help offset the cost. It was determined that construction costs to facilitate the transportation of untreated wastewater were significantly lower than the construction costs associated with treatment upgrade alternatives. Additionally, operation and maintenance costs to transport wastewater would be lower compared to the treatment upgrade alternatives.

The District held a community meeting on 7 January 2016 to discuss the engineering feasibility analysis and wastewater transport alternative with members of the public. Concerns were expressed regarding the preferred location of the treatment facility upgrades as well as the preferred pipeline route. Several ratepayers in the District voiced support for the lower cost alternative of transporting wastewater to another facility as a long-term interim solution for treatment, storage, and disposal until funding for treatment upgrades could be obtained.

As a result, the wastewater transport alternative was pursued and a draft Initial Study/Negative Declaration was completed that analyzed the potential impacts of transferring untreated wastewater by truck from the District facilities to the Russian River County Sanitation District (RRCSD) Main Lift Station,

located on Highway 116 in the unincorporated community of Guerneville. Untreated wastewater would be discharged into the RRCSD Main Lift Station collection system through a receiving station that would be installed on an adjacent vacant parcel owned by the RRCSD. Untreated wastewater would then be pumped to the RRCSD WWTF for treatment, storage, and disposal. In situations where transferring untreated wastewater to the RRCSD would not be feasible, including lack of access to RRCSD facilities during flood events, untreated wastewater would be transported to the ALWSZ WWTF for treatment, storage, and disposal.

The Initial Study/Negative Declaration was released for public review on 22 December 2016 and a public hearing was held on 16 February 2017. Comments received on the proposed project expressed concerns regarding the location of the proposed receiving station, traffic safety, noise, and odors, and led the District to cease work on the proposed project to explore potential alternatives to transferring wastewater to the RRCSD. The District analyzed the feasibility of utilizing other sanitation districts to treat, store, and dispose of the District's untreated wastewater, including at the Graton Community Services District and the ALWSZ. The District is proposing to transport all untreated wastewater to the ALWSZ WWTF.

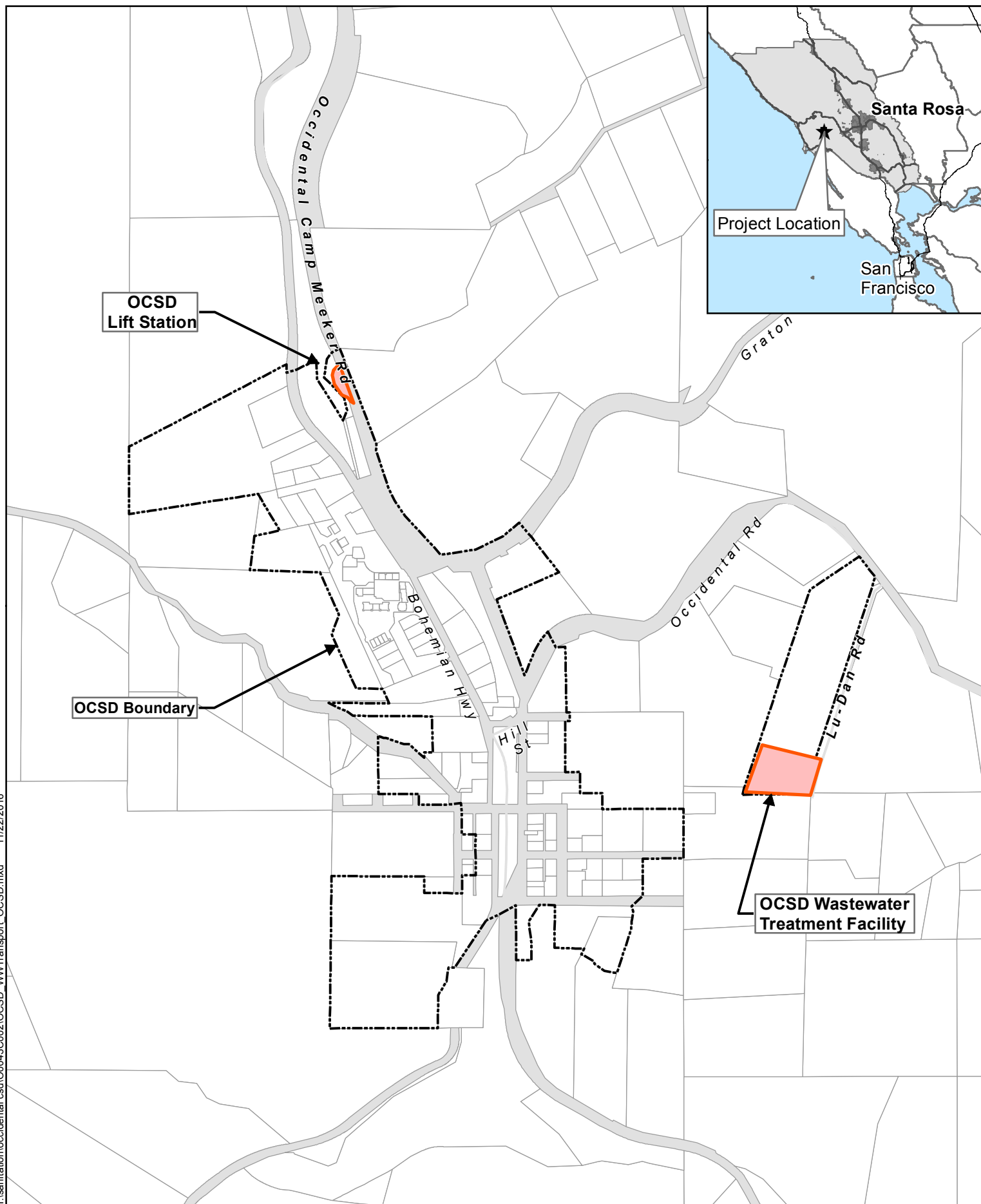
Project Need and Objectives

The Proposed Project would allow the District to comply with conditions set forth in Order No. R1-2012-0101 and CDO No. R1-2012-0102. The Proposed Project would transport untreated wastewater to the ALWSZ WWTF where it would be discharged into the collection system for treatment, storage, and disposal. The ALWSZ WWTF currently treats wastewater to tertiary-level standards and utilizes irrigation of agricultural lands for disposal of recycled water, with no discharges to surface waters. By transferring untreated wastewater to the ALWSZ for treatment, storage, and disposal, the Proposed Project would eliminate discharge of secondary-treated effluent into Dutch Bill Creek and Graham's Pond (a headwaters to Dutch Bill Creek), and would no longer rely on Graham's Pond for recycled water storage.

Project Location and Description

The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

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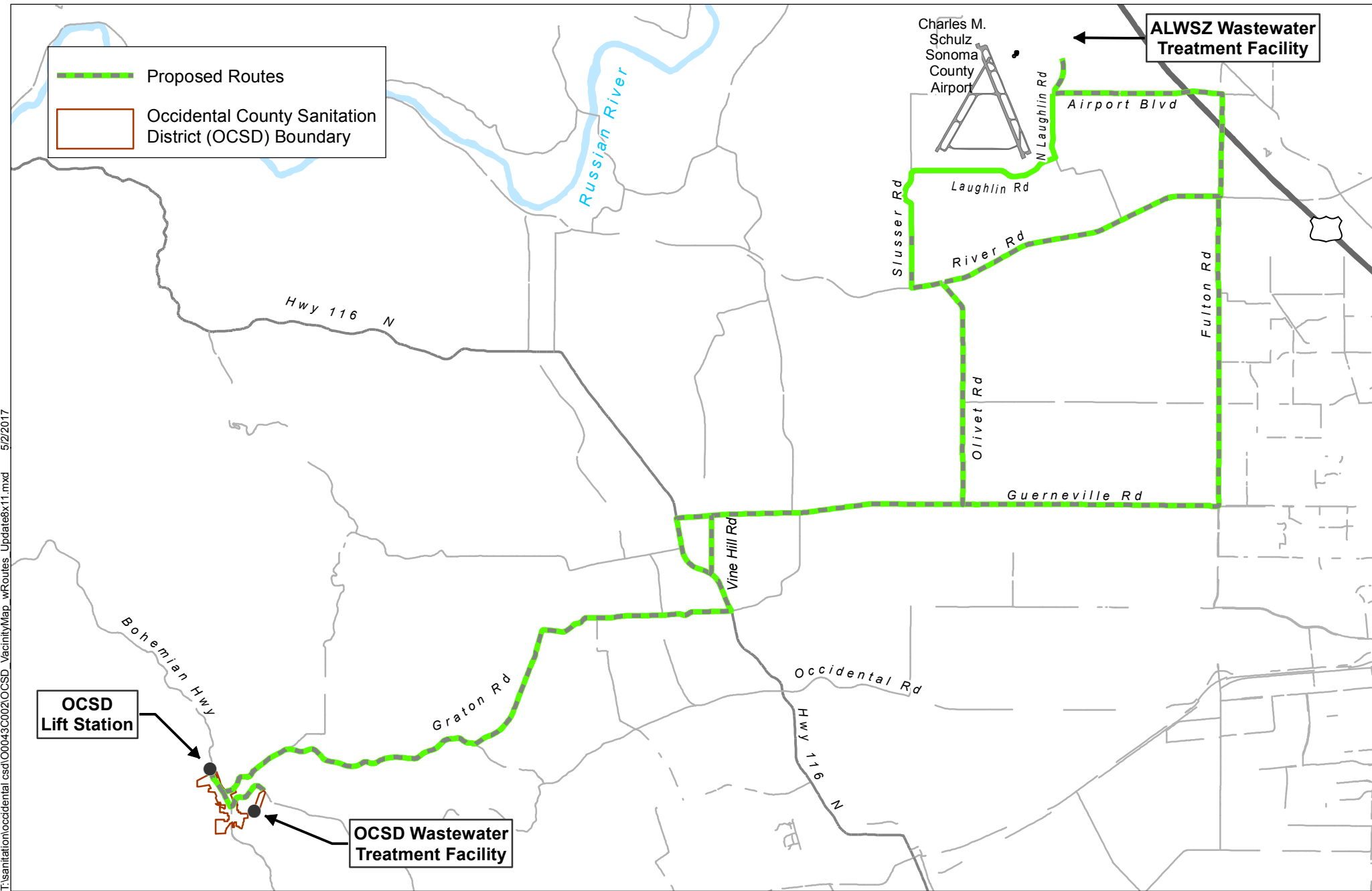


**Occidental County Sanitation District
Wastewater Transport Project
OCSD Location Map**

Figure 1



F:\sanitation\occidental.csd\00043C002\OCSD_VacinityMap_wRoutes_Update8x11.mxd 5/2/2017



OCSD to Airport Larkfield Wikiup Sanitation Zone (ALWSZ)
Wastewater Transport Project
Proposed Wastewater Transportation Routes

0 0.5 1 2 Miles

Figure 2



Issues to be Addressed in the Initial Study

In accordance with CEQA, the Initial Study will evaluate the potential environmental impacts, either individually or cumulatively, associated with the construction, operation, and maintenance of the Proposed Project. Areas of analysis may include: Aesthetics; Agricultural and Forest Resources; Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Transportation and Traffic; Tribal Cultural Resources; and Utilities and Service Systems. Where feasible, mitigation measures will be proposed to avoid or reduce impacts. Areas of analysis may be changed based on comments received from responsible agencies and the public during the NOP scoping period. Decision-makers, responsible and trustee agencies, and interested persons will also have an opportunity to comment on the applicable CEQA document, as determined by the Initial Study, after it is circulated for public review.

Public Comment Period for this Notice of Preparation

Due to the time limits mandated by State law, responses must be sent no later than 5:00 p.m. on Monday, June 26, 2017. Please include a name, address, and telephone number, and email address of a contact person for all future correspondence on this subject. Comments may be submitted electronically to jchurch@scwa.ca.gov or mailed to:

Occidental County Sanitation District, c/o Sonoma County Water Agency
Attn: Jeff Church
404 Aviation Boulevard
Santa Rosa, CA 95403

Documents or files related to the Proposed Project are available for review online at <http://www.scwa.ca.gov/OCSD/> or at the Water Agency's administrative office at 404 Aviation Boulevard, Santa Rosa, California, 95403. The NOP will also be available for review at the Sonoma County libraries in Occidental, Sebastopol, Guerneville, Santa Rosa (Northwest Branch), and Windsor.

If you have any questions regarding this NOP, or if you wish to update information on our mailing list, please contact Jeff Church at 707-547-1949 or jchurch@scwa.ca.gov.

Scoping Meeting

A public scoping meeting and open house will be held to provide the public and regulatory agencies an opportunity to ask questions and submit comments on the scope of the Initial Study. Water Agency staff will be available to answer questions and provide information about the project in order to allow interested parties to participate at any time during the Open House. Comment forms will be available for attendees to submit written comments. The meeting time and location are as follows:

Thursday, June 15, 2017
6:00 p.m. – 8:00 p.m.
Back Room, Union Hotel
3731 Main Street, Occidental, CA

DISABLED ACCOMMODATION: If you have a disability that requires an accommodation, an alternative format, or requires another person to assist you while attending this meeting, please contact the Sonoma County Water Agency at (707) 524-8378 as soon as possible to ensure arrangements for accommodation.



Notice of Preparation of Initial Study

OCCIDENTAL COUNTY SANITATION DISTRICT TO AIRPORT-LARKFIELD-WIKIUP SANITATION ZONE WASTEWATER TRANSPORT PROJECT

Upcoming Scoping Meeting:

Thursday, June 15, 2017

6:00 p.m. – 8:00 p.m.

Back Room, Union Hotel

3731 Main Street,

Occidental, CA

Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403

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From: Conteh, Stephen@DOT
To: [Jeff Church](#)
Cc: Maurice, Patricia@DOT
Subject: 04-SON-2017-00143 Occidental County Sanitation District Wastewater Treatment Compliance Project - NOP June 27, 2017.docx
Date: Tuesday, June 27, 2017 12:11:13 PM
Attachments: [04-SON-2017-00143 Occidental County Sanitation District Wastewater Treatment Compliance Project - NOP June 27, 2017.pdf](#)

Good afternoon Mr. Church:

Please find the attached soft copy of the Caltrans comment letter regarding the Occidental County Sanitation District Wastewater Treatment Compliance Project – Notice of Preparation. The original letter has been mailed via U.S Postal Service. Thank you for including Caltrans in the environmental review process. Should you have any questions regarding this letter or require any additional information, please feel free to contact me at (510) 286-5534 or stephen.conteh@dot.ca.gov.

Sincerely,

Stephen Conteh
Associate Transportation Planner
Local Development-Intergovernmental Review, District 4
111 Grand Avenue, MS 10D
Oakland, CA 94612
(510) 286-5534 office (510)286-5559 fax

DEPARTMENT OF TRANSPORTATION

DISTRICT 4

P.O. BOX 23660

OAKLAND, CA 94623-0660

PHONE (510) 286-5528

FAX (510) 286-5559

TTY 711

www.dot.ca.gov

*Making Conservation
a California Way of Life!*

June 27, 2017

Mr. Jeff Church
Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

04-SON-2017-00143
SCH #2014122028

Dear Mr. Church:

Occidental County Sanitation District Wastewater Treatment Compliance Project – Notice of Preparation (NOP)

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. In tandem with the Metropolitan Transportation Commission's (MTC) Sustainable Communities Strategy (SCS), Caltrans mission signals a modernization of our approach to evaluating and mitigating impacts to the State Transportation Network (STN). Caltrans' *Strategic Management Plan 2015-2020* aims to reduce Vehicle Miles Travelled (VMT) by tripling bicycle and doubling both pedestrian and transit travel by 2020. Our comments are based on the NOP. Please reference Caltrans comment letter dated January 23, 2017 as all comments still apply.

Project Understanding

The proposed project would transport untreated wastewater to the Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Treatment Facility (WWTF) where it would discharge into the collection system for treatment, storage, and disposal. The ALWSZ WWTF currently treats wastewater to tertiary-level standards and utilizes irrigation of agricultural lands for disposal of recycled water, with no discharge to surface waters. By transferring untreated wastewater to the ALWSZ for treatment, storage, and disposal, the proposed project would eliminate discharge of secondary-treated effluent into Dutch Bill Creek and Graham's Pond (a headwaters to Dutch Bill Creek), and would no longer rely on Graham's Pond for recycled water storage. The proposed project would transfer untreated wastewater by truck from the District facilities to the Russian River County Sanitation District (RRCSD) Main Lift Station, located on Highway 116 in the unincorporated community of Guerneville. Untreated wastewater would be discharged into the RRCSD Main Lift Station collection system through a receiving station that would be installed on an adjacent vacant parcel owned by the RRCSD. Untreated wastewater would then be pumped to the RRCSD WWTF for treatment, storage, and disposal. In situations where transferring untreated wastewater to the RRCSD would not be feasible, including lack of access to the RRCSD facilities during flood events, untreated wastewater would be transported to the ALWSZ WWTF for

treatment, storage, and disposal.

Affected State facilities include State Route (SR) 116 and US 101.

Please provide a vicinity map, regional location map, and site plan clearly showing the proposed receiving station that would be constructed on the adjacent vacant parcel owned by the RRSCD and the location of all District facilities related to the treatment, storage, and disposal of wastewater in relation to the STN. Clearly identify State right of way, bicycle paths, and transit facilities within the study area.

Lead Agency

As the Lead Agency, Sonoma County Water Agency is responsible for all project mitigation, including any needed improvements to the STN. The project's financing, scheduling, implementation responsibilities and monitoring should be fully discussed for all proposed mitigation measures, prior to the submittal of an encroachment permit.

Cultural Resources

In accordance with the California Environmental Quality Act (CEQA) and Assembly Bill 52, we recommend that the Sonoma County Water Agency conduct Native American consultation with tribes, groups, and individuals who are interested in the project area and may have knowledge of Tribal Cultural Resources or other scared sites. Portions of the project area are located in areas with a high surface potential for archaeological resources. It is recommended that the Sonoma County Water Agency have a cultural resources survey conducted by a qualified archaeologist and a qualified architectural historian.

Transportation Management Plan

Please identify whether any construction staging adjacent to SR 116 is anticipated. If it is determined that traffic restrictions and detours might be needed on or near SR 116, a Transportation Management Plan (TMP) may be required from the developer for approval by Caltrans prior to construction. TMPs must be prepared in accordance with the California *Manual on Uniform Traffic Control Devices*. Further information is available for download at the following web address: <http://www.dot.ca.gov/hq/traffops/engineering/mutcd/pdf/camutcd2014/Part6.pdf>. Please ensure that such plans are also prepared in accordance with the TMP requirements of the Sonoma County. For further TMP assistance, please contact the Office of Operations Strategies at 510-286-4579.

Transportation Permit

Project work that requires movement of oversized or excessive load vehicles on the STN requires a transportation permit that is issued by Caltrans. To apply, a completed transportation permit application with the determined specific route(s) for the shipper to follow from origin to destination must be submitted to: Caltrans Transportation Permits Office, 1823 14th Street, Sacramento, CA 95811-7119. See the following website for more information:

Mr. Jeff Church, Sonoma County Water Agency
June 27, 2017
Page 3

<http://www.dot.ca.gov/hq/traffops/permits>.

Encroachment Permit

The applicant will be required to apply for and obtain an encroachment permit for any work within Caltrans ROW prior to construction. As part of the encroachment permit process, the applicant must provide the appropriate California Environmental Quality Act approval, where applicable, for potential environmental impacts within the ROW. The applicant is responsible for quantifying the environmental impacts of the improvements within Caltrans ROW (project-level analysis) and completing appropriate avoidance, minimization and mitigation measures.

To apply for an encroachment permit, please complete an encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW, and submit to the following address: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See the website link below for more information: <http://www.dot.ca.gov/hq/traffops/developserv/permits>.

Should you have any questions regarding this letter, please contact Stephen Conteh at 510-286-5534 or stephen.conteh@dot.ca.gov.

Sincerely,



PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

COMMENT CARD**SCOPING MEETING****Notice of Preparation of Initial Study
Occidental County Sanitation District to
Airport-Larkfield-Wikiup Sanitation Zone
Wastewater Transport Project**

Comments can be emailed to
jchurch@scwa.ca.gov or mailed to:
Occidental County Sanitation District,
c/o Sonoma County Water Agency
Attn: Jeff Church
404 Aviation Boulevard
Santa Rosa, CA 95403

Comments Due by 5 p.m., Monday, June 26, 2017

NAME	ADDRESS/EMAIL/PHONE NUMBER	ORGANIZATION	CHECK TO ADD TO MAILING LIST
Dan Gagen	Harrison Grade Rd.	Resident	

COMMENT:

Concern is around cost and providing
a reliable range to consumers + residences.

From: [Heather Hendrickson](#)
To: [Jeff Church](#)
Subject: Occidental sewer
Date: Thursday, June 08, 2017 8:53:06 PM

Dear Jeff,

I am enclosing a link to an article that states my opinion regarding Occidental's sewer issues. Can you please explain the political motive for trucking sewer rather building a sewer plant in Occidental? Also, I want to know how much it costs for one truck to travel from Occidental to the Airport plant and back? I also would like to know the name of the company that will be hauling the raw sewer on our worn out west county roads?

<http://www.sonomacountygazette.com/cms/pages/sonoma-county-news-article-6333.html>

Thank you,

Heather Hendrickson

From: [Lynda Hopkins](#)
To: [Heather Hendrickson](#)
Cc: [Ann DuBay](#); [Jeff Church](#)
Subject: Re: The cost of trucking raw sewer
Date: Wednesday, June 14, 2017 11:09:12 PM

Hi Heather,

I will let SCWA staff respond to this excellent question. I questioned SCWA staff in detail about Ann Maurice's piece back in March, and they can best explain what costs were not factored into the estimate her article provided.

Lynda

Sent from my iPhone

On Jun 14, 2017, at 9:06 PM, Heather Hendrickson <heatherhdsn@mac.com> wrote:

Dear County Reps,

I received the Notice of Preparation of Initial Study for the Trucking of Occidental's raw sewer to the ALWSZ.

I am concerned about the impact on the roads, the safety of our children on school buses, the impact on the tourist business and the grave environmental consequences with 10 trips a day from Occidental to ALWSZ and up to 15 a day in the wet season. Of course the worst nightmare is that one of the trucks spill raw sewer and if you Google sewer and trucking the first links that come up are spills!!

Just for an exercise in numbers I figured that each trip would cost at the bare minimum \$200.00 not counting HAZMAT fees and other special needs. I am not even taking into consideration the increase of trips for the wet weather.

5 tucks a day @ \$200.00 a trip = \$1000.00

365 days @ \$1000.00 a day = \$365,000.00

6 years at this rate= \$2,920,000.00

In 6 years SCWA will spend close to \$3 million dollars and cause environmental

impacts, jeopardize the safety of the people, burn excessive fossil fuels and pollute the air and not improve Occidental's Sanitation issues.

Is there a better solution? Yes and I quote Ann Maurice from the March issue of Sonoma County Gazette:

*Yes, there is a long-term, affordable "tertiary" wastewater treatment system for Occidental. There are even three, yes, **three technologies** to choose from. All three were reviewed by **Stantec**, a huge, independent engineering firm with offices in Santa Rosa, Petaluma, Central and Southern California, all over the U.S. and Canada.*

*Stantec's conclusion? That **all three** technologies -- Aeromod, Membrane Bio Reactor (MBR) and Sequencing Batch Reactor (SBR) are affordable for Occidental. How affordable? Stantec advised the County Water Agency (SCWA)*

*that each of the three would **cost only about \$3 million installed in Occidental**. That price included every cost that Stantec engineers, in their experience could anticipate, including an additional percentage for inevitable overruns!*

I am confused as to why SCWA has so much money to spend on sewer trucks and no money for an effective permanent solution.

Please act in the best interests of the community and the people you serve.

Thank you,

Heather Hendrickson

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(707) 575-3427
le@lescore-engineers.com
5468 Skylane Blvd Suite 203
Santa Rosa CA 95403

2017-06-15

(707) 526-5370 O
(707) 544-6123 F

Sonoma County Water Agency
404 Aviation Blvd
Santa Rosa CA 95403

Attn: Project Engineer

email

Subject: Occidental Sewage Project

QUESTIONS REGARDING THE TRANSPORT PROJECT

- 1) **SUSTAINABILITY** - Does SCWA view sewage transport as a permanent solution?
 - A) If not, why not?
 - B) If not, how soon will SCWA begin planning & engineering the permanent solution?
 - C) If SCWA does regard transport as a permanent solution, how does that weigh against other potential solutions which have been proposed, in terms of sustainability, cost, greenhouse gas generation, traffic risks, & other such environmental concerns?
- 2) **OPTIONS** - If transport is not a permanent option, what options is SCWA looking at beyond transport?
 - A) Is SCWA aware of advances made in decentralized wastewater technology since the North Coast RWQCB vetoed plans in 2002?
 - B) Has SCWA recently re-examined these soil absorption effluent dispersal systems?
 - C) Is SCWA prepared to adopt such advanced technologies if they prove to be the cost-effective and affordable option for Occidental.?
 - D) Has SCWA consulted recently with North Coast RWQCB staff regarding these technologic advances & their policy in that regard?
 - E) If so, what is the Regional Board's stance/policy in that regard, and how does SCWA plan to react/engage to advance the welfare of Occidental & similarly situated communities such as Fitch Mountain, Summer Home Park, Monte Rio, Duncan's Mills, etc.?

3) **COSTS** - How will the ALWSZ rate payers be compensated for management of Occidental's wastes?

- A) Please provide your detailed analysis of the added costs to ALWSZ and the effect of those costs on the Occidental sewage rates.
- B) Will SCWA continue to subsidize Occidental's sewage rates at the same, greater, or less than historic levels?
- C) Does your analysis include the added costs of wear & tear on County Roads & how will the County Dept of Transportation be compensated? What is that cost?
- D) Does your analysis recognize that the Skylane Boulevard intersection to the ALWSZ WRRF floods frequently, and that heavy truck traffic will accelerate road damage under flooded conditions. Pavement at that intersection is already quite deteriorated due to periodic flooding and perpetual heavy truck traffic. I anticipate with the added hauling traffic the intersection pavement will need a deep rebuild of the base. Simply resurfacing will not support the heavy traffic.
- E) I assume the tanker trucks can ford those waters, but in the event they cannot, what is the
- F) alternative plan for disposal of the trucked waste?

4) **REFERENCES**

- A) The attached WERF reference sheet with its embedded links can be accessed here: http://www.werf.org/i/c/DecentralizedCost/Decentralized_Cost.aspx
- B) The attached DWRC reference can be accessed here: <http://decentralizedwater.org/>

I thank you in advance for your thoughtful responses.

Sincerely,

Peter J.
Lescure, PE

Digitally signed by Peter J.
Lescure, PE
DN: cn=Peter J. Lescure, PE,
o=Lescure Engineers, Inc, ou,
email=PLescure@Lescure-
Engineers.com, c=US
Date: 2017.06.15 15:06:09 -07'00'

Peter J. Lescure, PE
Principal Civil Engineer
RCE 28044

Encl Ex's 4A & 4B

cc file Occidental-ALWSZ Transport Questions.docx



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- HOME ABOUT WE&RF NEWS RESEARCH AREAS FUNDING AWARDS JOIN WE&RF

DECENTRALIZED SYSTEMS PERFORMANCE AND COSTS FACT SHEETS

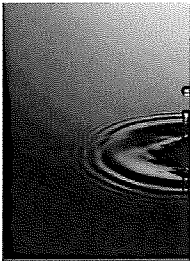
SMALL COMMUNITY LEADERS AND PLANNERS HAVE A CRITICAL NEED FOR INFORMATION AND TOOLS TO HELP MAKE GOOD DECISIONS CONCERNING LOCAL WASTEWATER MANAGEMENT.

Community leaders and planners can use the resources on this page to help evaluate the performance, cost, and other factors of various technologies and decide which are the most appropriate for their particular needs.

The Fact Sheets below give basic information on the full range of currently available collection, treatment and dispersal technologies for wastewater management and how they may be used individually or in combination.

A spreadsheet tool provides planning level cost estimations of different decentralized wastewater management scenarios commonly used in small communities. Initial capital costs as well as long-term maintenance and energy costs are included. Users can take advantage of the default unit cost values provided based on national data or use better, local information when available.

The information on this page is not intended to serve as a design manual, but rather to provide small community decision-makers the information necessary to work with engineers, soils professionals, construction managers and financial personnel to get the best wastewater solution for their community.



To get started, we recommend reading the [Wastewater Basics for Small Community Leaders and Planners](#) which provides an overview of and context for the Fact Sheets [a](#)
(Download Acrobat Reader if you can't read the linked fact sheets below.)

Collection Fact Sheets	Treatment Fact Sheets	Dispersal Fact Sheets	Cost Tool
C1: Gravity Sewer Systems	T1: Liquid-Solid Separation	D1: Gravity Distribution	User's Guide
C2: Pressure Sewer Systems	T2: Suspended Growth Aerobic Treatment	D2: Low Pressure Distribution	Wastewater Planning Model, Version 1.0
C3: Effluent Sewer Systems	T3: Fixed Growth Aerobic Treatment	D3: Drip Distribution	
C4: Vacuum Sewer Systems	T4: Constructed Wetland Systems	D4: Spray Distribution	
	T5: Lagoons	D5: Evapotranspiration System	
	T6: Nutrient Reduction	D6: Surface Water Discharge	
	T7: Disinfection	D7: Wastewater Reuse	
	T8: Residuals Management		

Download a full set of all fact sheets.

WERF's Decentralized Knowledge Area | Acknowledgements | Copyright Information

Connect with WE&RF

Water Environment & Reuse Foundation
1199 N Fairfax St, Suite 900
Alexandria, VA 22314-1445 | 571-384-2100

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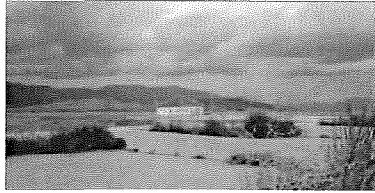
ABOUT

STRATEGIC THINKING

RESEARCH PROJECTS

NEWS AND RESOURCES

Completed by
Category
Completed by Year
Ongoing



Environmental Science and Engineering

Performance and Costs for Decentralized Unit Processes

Publication Date: November 2010

Cooperating Institution: University of Tennessee

Principal Investigator: John Buchanan

Project Budget: \$180,089

Project Identifier: DEC2R08

DESCRIPTION

Small community leaders and planners have a critical need for information and tools to help make good decisions concerning local wastewater management. Community leaders and planners can use the resources from this project to help evaluate the performance, cost, and other factors of various technologies and decide which are the most appropriate for their particular needs.

This project includes a several interconnected products. The products consist of three components: a primer on wastewater basics; a series of fact sheets on decentralized wastewater collection, treatment and dispersal; and a decentralized wastewater cost estimation tool and accompanying user's guide.

The primer, Wastewater Basics for Small Community Leaders and Planners, is the best place for users to get started. This document provides an overview of and context for the fact sheets and cost tool that were developed as part of this project.

A series of nineteen fact sheets give basic information on the full range of currently available collection, treatment and dispersal technologies for wastewater management and how they may be used individually or in combination. The fact sheets include the following:

Collection Fact Sheets

- C1: Gravity Sewer Systems
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- C3: Effluent Sewer Systems
- C4: Vacuum sewer Systems

Treatment Fact Sheets

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The information from this project is not intended for detailed design, but rather to provide small community decision-makers the information necessary to work with engineers, soils professionals, construction managers and financial personnel to get the best wastewater solution for their community.

All of the products are available for download from a specially designed project website: www.werf.org/decentralizedcost. Alternatively, users can download the final compendium report which contains all the products in one document with the exception of the spreadsheet cost tool, which can only be downloaded from the website.

Associated Documents:

- Project Website
- Final Report

From: [John Loades](#)
To: [Jeff Church](#)
Subject: Occidental County Sanitation District - NOP comments
Date: Monday, June 19, 2017 8:57:38 PM

June 19, 2017

Occidental County Sanitation District

Jeff Church

Sonoma County Water Agency

404 Aviation Boulevard

Santa Rosa, CA 95403

Dear Mr. Church,

RE: Comments – Notice of Preparation of Initial Study Occidental County Sanitation District to

Airport-Larkfield-Wickiup Sanitation Zone Wastewater Transport Project

We have three comments. All three are of equal importance. We do not agree with the method that was used to introduce the proposed project to the community. We do like the idea of trucking wastewater to ALWSZ **temporarily**. The “milestone or step” description for June 2013, listed on the informational sheet, “Occidental County Sanitation District, *Past Milestones and Steps Toward Solutions*” was an insult to the people of this county and beyond.

Meeting/Open House:

To the best of our recollections, (and we have been attending meetings with SCWA since 1995) information has never been distributed as it was in Occidental, on Thursday, June 15, 2017. This caused a great deal of frustration and skepticism.

At past sessions a representative from SCWA introduced all the other members from SCWA. This time, not all the representatives were easily identified. It was a good thing some were wearing SCWA shirts, and fortunately we knew the others. But how many other people in the

room did? Some people are too shy to ask for names.

In other meetings, SCWA representatives explained their portion of the project and entertained questions from the audience, not a few people standing in front of them. We don't know if all the participants heard the same information. There was no transparency.

Listening to questions and answers has always clarified issues brought up at former gatherings. All the participants have had the opportunity to build on one and another's thoughts and comments. There has been the opportunity to challenge or correct comments also. Ideas have been generated by listening to each other. Checks and balances were not in play on June 15, 2017.

We heard snatches of conversation and do not know what is true and what is hearsay. For example, one person told us this was being treated as an entirely new project and another said it was a new component of an older project. Either way, there are different regulations that need to be followed. So which is it? Someone also said the ratepayers in Occidental will have the final say. Oh really, SCWA is just going to ignore all the people on the truck route(s) and neighbors of the plant? (Guerneville all over again?) Rumors were tossed about regarding Graton yet there was not a definite answer as to why it would or would not be feasible.

Some of us felt just as compartmentalized as the three displays were that night. Only a few of us were able to learn about each other's concerns, fears, and why some approved of the trucking idea. We noticed several people show up, realize there was no formal meeting and left without even signing in. The use of the term "meeting" gave us the impression we would be attending a session similar to the ones in the past. It was misleading.

Trucking as a temporary solution:

We are supporting "trucking" as a temporary solution only. We know better than most about SCWA's attempts to solve Occidental's waste water challenge and that trucking appears to be the last resort. We feel trucking must not be a permanent solution for the following reasons.

We are all concerned about the size of the carbon footprint extra trucks on the road will leave.

There is a definite possibility of some type of harm to people and/or the environment, (the more trips, the more likely an accident.)

If the population of the Santa Rosa continues to increase, will the plant's current capacity need

to increase to be able to handle Occidental's wastewater?

Has the ALWSZ had any violations in the last three years? What is the over-all condition of the plant?

There are options available. (see the Stantec Report) Re-evaluate the cost break-down. SCWA was willing to build a wastewater storage pond on private property for five million dollars in 2013. Surely those funds can be used to finance a state of the art plant for Occidental?

If trucking is such a great solution, then we can only conclude, SCWA wasted a great deal of time, energy, and money exploring the 15 other options that were discussed in the last 18 years. Every so often someone would mention trucking and each time it was dismissed. We wonder why.

Setting the record straight about the June 2013 milestone:

“Based on landowner opposition the Water Agency decided not to move forward with the project.” What an insult to the many people, (landowners and renters alike) that were involved in stopping this project. They rallied behind us knowing that constructing a 12.5 million gallon wastewater storage pond weighing approximately 103,750,000 pounds on documented unstable ground less than three miles from their town was ludicrous. They held meetings in their homes, purchased and posted signs, wrote letters, and attended the June 2013 scoping session.

The statement should have read, based on public opposition, cost, and the comments and list of requirements that needed to be met in the Draft Environmental Impact Report sent to Mr. Church from the North Coast Regional Water Quality Control Board, (June 28, 2013) the agency decided not to move forward with the project.

We sincerely hope, the next notification we receive from SCWA will be the announcement a project has been approved and is moving forward. The health of Graham's Pond depends on it.

Sincerely,

John and Pauline Loades

COMMENT CARD

SCOPING MEETING

**Notice of Preparation of Initial Study
Occidental County Sanitation District to
Airport-Larkfield-Wikiup Sanitation Zone
Wastewater Transport Project**

Comments can be emailed to
jchurch@scwa.ca.gov or mailed to:
Occidental County Sanitation District,
c/o Sonoma County Water Agency
Attn: Jeff Church
404 Aviation Boulevard
Santa Rosa, CA 95403

Comments Due by 5 p.m., Monday, June 26, 2017

NAME	ADDRESS/EMAIL/PHONE NUMBER	ORGANIZATION	CHECK TO ADD TO MAILING LIST
John & Pauline Loades	P.O. Box 247 Occidental, CA 95465 874-9165	Landowner	<input checked="" type="checkbox"/>

COMMENT:

see attached

ORIGINAL DOCUMENT

JUN 26 2017

SONOMA COUNTY WATER AGENCY

To: Church

Proj/Occidental CSD to A-L-W SZ
Wastewater Transport 70-704-7 #P1

June 19, 2017

Occidental County Sanitation District

Jeff Church
Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

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RE: Comments – Notice of Preparation of Initial Study Occidental County Sanitation District to
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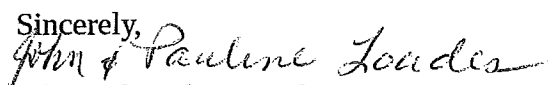
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COMMENT CARD**SCOPING MEETING****Notice of Preparation of Initial Study
Occidental County Sanitation District to
Airport-Larkfield-Wikiup Sanitation Zone
Wastewater Transport Project**

Comments can be emailed to
jchurch@scwa.ca.gov or mailed to:
Occidental County Sanitation District,
c/o Sonoma County Water Agency
Attn: Jeff Church
404 Aviation Boulevard
Santa Rosa, CA 95403

Comments Due by 5 p.m., Monday, June 26, 2017

NAME	ADDRESS/EMAIL/PHONE NUMBER	ORGANIZATION	CHECK TO ADD TO MAILING LIST
ANN MAURICE	annmaurice954@gmail	ad hoc committee for clean water	

COMMENT:

att: Lynda Hopkins

I'm so disappointed at this shaming
@ meeting. Disgraceful!

1. No presentation by SCWA?!?!?
2. No name tags who is who
who is with SCWA?
3. Ideas build on ideas. No
opportunity to hear each others'
concerns. especially concerns along Truck Route
Very effective at isolating members
of the public from one another
4. What happened to Graton? Not a
word. Not even in N.O.P.
5. No discussion of Stantec report
not even in N.O.P. mailer
6. No explanation of charts & maps
Trucked from where? How often?
7. Where's Lynda? She needed
to hear these concerns.
8. We need a new scoping session!

From: [ann maurice](#)
To: [Jeff Church](#)
Subject: [SPAM] Fwd: On Moral Bankruptcy and Occidental Wastewater notice of preparation
Date: Friday, June 16, 2017 2:21:05 PM
Importance: Low

An Open Letter to the Sonoma County Water Agency, Board of Supervisors and the people of Occidental

By Ann Maurice,
Ad Hoc Committee for Clean Water
annmaurice954@gmail.com

After more than 25 years of the Sonoma County Water Agency playing games around Occidental sewage disposal, the newest insult emerges. Wrapped in moral bankruptcy, the otherwise enjoyable and beautiful town seems to have no problem acting like a selfish prima donna with no need to request, but rather just impose their raw sewage unnecessarily on the rest of us with impunity.

The latest plan is to drive huge tanker trucks carrying raw sewage up to 15 trips per day along our twisting, narrow, shoulderless country roads putting drivers and bicyclists at risk. The latest route is from Occidental along Graton Road to Hwy 116 and Vine Hill Road, Guerneville Road, Olivet, Slusser, McLaughlin and Fulton Roads all the way to Airport Boulevard and the treatment plant.

Why is this plan morally bankrupt? Because few Occidental ratepayers even show up for these meetings even though this latest one was at the Union Hotel in Occidental! Few in Occidental even take responsibility for the millions of gallons of sewage they create, instead, just impose their waste on others -- out of sight out of mind dumped elsewhere as cheaply as possible. And the Water Agency, the immoral enabler, is pushing that foul-smelling agenda.

The most recent in the 30 year history of failed proposals was to truck Occidental's wastewater to a rural Guerneville neighborhood. The residents of Guerneville Park hollered "murder", and furiously kicked that plan out of their neighborhood. So the new plan was to truck Occidental's raw sewage to Graton! What happened to that? Did Graton residents squawk? We don't even know because the Water Agency isn't talking! Now, the plan is to take the wastewater to a Larkfield/Wikiup location.

Is trucking raw sewage around West County the only viable option? HECK NO! There are 3 tertiary technologies available to choose from and all economically feasible to be constructed IN TOWN! The Water Agency thought the \$7 million, \$10 million, \$13 million absurd options they considered only 3 years ago, were all financially "feasible". All of a sudden, a cheaper \$5 million rational and practical TERTIARY treatment option with ultra-violet disinfection IN Occidental is "too expensive"!

Are grants even necessary? NO! We believe the funds are buried in the coffers of the Water Agency, they'd just rather spend big bucks on pensions and benefits for their \$250,000 a year engineers! We asked for an accounting and are still, 4 years later, waiting!

If tanker trucks are an "interim" plan, they are certainly no long term solution! A tertiary

treatment plant IN TOWN, is affordable and feasible. The cheapest and, we say, the best option is Aeromod. It's proven effective, easy to operate, cheap to maintain and proven successful in our North Coast

Region. Enough of these failed plans, wasted time, and wasted money! And enough of the prima donna mentality that is an embarrassment to our community! Occidental has no right to dump its sewage on the rest of us disrupting our lives, our properties and putting us at risk for their own

economic benefit. Nefarious, hidden, political agendas must be at play because reasonableness, fairness and common courtesy have been kicked to the curb!

See the Sonoma County Gazette archives for numerous articles on the Ad Hoc Committee for Clean Water's alternative proposals.



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

Notice of Preparation

May 30, 2017

To: Reviewing Agencies

Re: Occidental county Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project
SCH# 2017052078

Attached for your review and comment is the Notice of Preparation (NOP) for the Occidental county Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Jeff Church
Occidental County Sanitation District
404 Aviation Blvd.
Santa Rosa, CA 95403

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

ORIGINAL COPY
JUN 2 2017

SONOMA COUNTY WATER AGENCY

To: Church

Proj/Occidental CSD to A-L-W SZ Wastewater Transport
70-704-7 #P1

**Document Details Report
State Clearinghouse Data Base**

SCH# 2017052078
Project Title Occidental county Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport
Lead Agency Project
Occidental County Sanitation District

Type NOP Notice of Preparation

Description The proposed project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approx. 52 miles northwest of SF, CA. The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road, and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road. Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located approx. 18 miles from the District on Aviation Blvd. near the Charles M. Schulz Sonoma County Airport in Santa Rosa. Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental. Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa.

Lead Agency Contact

Name Jeff Church
Agency Occidental County Sanitation District
Phone 707-547-1949 **Fax**
email
Address 404 Aviation Blvd.
City Santa Rosa **State** CA **Zip** 95403

Project Location

County Sonoma
City
Region
Cross Streets
Lat / Long
Parcel No.

Township	Range	Section	Base
-----------------	--------------	----------------	-------------

Proximity to:

Highways
Airports
Railways
Waterways
Schools
Land Use

Project Issues Aesthetic/Visual; Agricultural Land; Forest Land/Fire Hazard; Biological Resources; Geologic/Seismic; Soil Erosion/Compaction/Grading; Other Issues; Toxic/Hazardous; Water Quality; Water Supply; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Traffic/Circulation; Tribal Cultural Resources

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Wildlife, Region 3; Native American Heritage Commission; Public Utilities Commission; Cal Fire; Caltrans, District 4; Regional Water Quality Control Board, Region 1

Document Details Report
State Clearinghouse Data Base

Date Received 05/30/2017

Start of Review 05/30/2017

End of Review 06/28/2017

NOP Distribution List

County: Sonoma

SCH# 2017052078

Resources Agency

☒ Resources Agency
Nadell Gayou

☒ Dept. of Boating & Waterways
Denise Peterson

☒ California Coastal Commission
Elizabeth A. Fuchs

☒ Colorado River Board
Lisa Johansen

☒ Dept. of Conservation
Crina Chan

☒ Cal Fire
Dan Foster

☒ Central Valley Flood Protection Board
James Herota

☒ Office of Historic Preservation
Ron Parsons

☒ Dept of Parks & Recreation
Environmental Stewardship Section

☒ S.F. Bay Conservation & Dev't. Comm.
Steve Goldbeck

☒ Dept. of Water Resources
Resources Agency
Nadell Gayou

Fish and Game

☒ Dept. of Fish & Wildlife
Scott Flint
Environmental Services Division

☒ Fish & Wildlife Region 1
Curt Babcock

☒ Fish & Wildlife Region 1E
Laurie Harnsberger

☒ Fish & Wildlife Region 2
Jeff Drongesen

☒ Fish & Wildlife Region 3
Craig Weightman

☐ Fish & Wildlife Region 4
Julie Vance

☐ Fish & Wildlife Region 5
Leslie Newton-Reed
Habitat Conservation Program

☐ Fish & Wildlife Region 6
Tiffany Ellis
Habitat Conservation Program

☐ Fish & Wildlife Region 6 I/M
Heidi Calvert
Inyo/Mono, Habitat Conservation Program

☐ Dept. of Fish & Wildlife M
William Paznokas
Marine Region

Other Departments

☐ California Department of Education
Lesley Taylor

☐ OES (Office of Emergency Services)
Monique Wilber

☐ Food & Agriculture
Sandra Schubert
Dept. of Food and Agriculture

☐ Dept. of General Services
Cathy Buck
Environmental Services Section

☐ Housing & Comm. Dev.
CEQA Coordinator
Housing Policy Division

Independent Commissions, Boards

☐ Delta Protection Commission
Erik Vink

☐ Delta Stewardship Council
Kevan Samsam

☐ California Energy Commission
Eric Knight

☒ Native American Heritage Comm.
Debbie Treadway

☒ Public Utilities Commission
Supervisor

☐ Santa Monica Bay Restoration
Guangyu Wang

☐ State Lands Commission
Jennifer Deleong

☐ Tahoe Regional Planning Agency (TRPA)
Cherry Jacques

Cal State Transportation Agency CalSTA

☐ Caltrans - Division of Aeronautics
Philip Crimmins

☐ Caltrans - Planning
HQ LD-IGR
Christian Bushong

☒ California Highway Patrol
Suzann Ikeuchi
Office of Special Projects

Dept. of Transportation

☐ Caltrans, District 1
Rex Jackman

☐ Caltrans, District 2
Marcelino Gonzalez

☐ Caltrans, District 3
Eric Federicks - South
Susan Zanchi - North

☒ Caltrans, District 4
Patricia Maurice

☐ Caltrans, District 5
Larry Newland

☐ Caltrans, District 6
Michael Navarro

☐ Caltrans, District 7
Dianna Watson

☐ Caltrans, District 8
Mark Roberts

☐ Caltrans, District 9
Gayle Rosander

☐ Caltrans, District 10
Tom Dumas

☐ Caltrans, District 11
Jacob Armstrong

☐ Caltrans, District 12
Maureen El Harake

Cal EPA

Air Resources Board

☐ Airport & Freight
Jack Wursten

☐ Transportation Projects
Nesamani Kalandiyur

☐ Industrial/Energy Projects
Mike Tollstrup

☐ California Department of Resources, Recycling & Recovery
Sue O'Leary

☐ State Water Resources Control Board
Regional Programs Unit
Division of Financial Assistance

☐ State Water Resources Control Board
Cindy Forbes - Asst Deputy
Division of Drinking Water

☐ State Water Resources Control Board
Div. Drinking Water # _____

☐ State Water Resources Control Board
Student Intern, 401 Water Quality Certification Unit
Division of Water Quality

☐ State Water Resources Control Board
Phil Crader
Division of Water Rights

☐ Dept. of Toxic Substances Control
CEQA Tracking Center

☐ Department of Pesticide Regulation
CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

☒ RWQCB 1
Cathleen Hudson
North Coast Region (1)

☐ RWQCB 2
Environmental Document Coordinator
San Francisco Bay Region (2)

☐ RWQCB 3
Central Coast Region (3)

☐ RWQCB 4
Teresa Rodgers
Los Angeles Region (4)

☐ RWQCB 5S
Central Valley Region (5)

☐ RWQCB 5F
Central Valley Region (5)
Fresno Branch Office

☐ RWQCB 5R
Central Valley Region (5)
Redding Branch Office

☐ RWQCB 6
Lahontan Region (6)

☐ RWQCB 6V
Lahontan Region (6)
Victorville Branch Office

☐ RWQCB 7
Colorado River Basin Region (7)

☐ RWQCB 8
Santa Ana Region (8)

☐ RWQCB 9
San Diego Region (9)

☐ Other _____

☐ _____
Conservancy

From: [Joe Soulia](#)
To: [Jeff Church](#)
Cc: [Jeff Pringle](#); [Bill Beck](#)
Subject: Occidental Sanitation District Airport Project
Date: Friday, June 23, 2017 10:28:25 AM
Attachments: [Airport Larkfield Wikiup Transport Project.pdf](#)

Hello Jeff.

I am in the Government Relations Department at Orenco Systems. We have extensive experience with onsite systems, including community systems, and I have some comments to the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project. Please see attached. Thanks

Joe

Joseph Soulia
Senior Government Relations Representative
jsoulia@orencosystems.com
(800) 230-9580
(541) 537-0772

Orenco Systems[®]
Incorporated

814 Airway Ave.

Sutherlin, OR

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22 June 2017

Jeff Church
Occidental County Sanitation District
c/o Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, CA 95403

Dear Jeff,

On behalf of Orenco Systems, Inc[®], I would like to offer comments on the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project.

The North Coast Regional Water Quality Control Board issued a CDO effective in 2018 to stop releasing secondary treated water into Graham's pond. What treatment standards (tertiary) would the North Coast RWQCB require? Modern onsite wastewater treatment systems can treat to tertiary treatment levels at considerably less cost than in the past. Operation and Maintenance of onsite systems has also improved considerably in recent years. Has this option been recently and thoroughly explored?

Trucking up to 15 loads of wastewater per day will be expensive in the long run, and is environmentally unsustainable, with a large carbon footprint. With truck maintenance, truck driver pay, etc. this doesn't seem to be a viable long-term solution.

Water-reuse regulations have changed recently, in response to California's historic drought. Have sub-surface drip irrigation options been fully explored?

The Project Document mentions that over the past two decades, at least 15 alternatives have been identified, studied and rejected because they were technically unworkable, were too expensive, or did not have community support. The document goes on to say that "in the future if technological advances result in lower cost solutions", then a more permanent solution can be found. These lower-cost solutions do currently exist. Public opinion and regulations have also evolved substantially in the last 5 years with respect to water reuse. Some of the alternatives that have been rejected in the past should be reviewed, given the current level of technologies and changes in public opinion.

Best regards,



Joseph Soulia
Senior Government Relations Representative

From: [Rebecca Radtke](#)
To: [Jeff Church](#)
Cc: [Lynda Hopkins](#)
Subject: OCSD Public Meeting Thurs 6/15 @ 6PM
Date: Tuesday, June 13, 2017 5:22:46 PM

Hi Jeff,

Did the SCWA issue responses to the questions that were brought up at the February meeting in Monte Rio, and if so can I get a copy? I'd like to understand the SWCA's response to the alternative treatment solutions that Ann Maurice's committee had presented to the SWCA as well (recap in article below). And I'd like to understand why Graton is off the table. I see you've mentioned the GCSD in your NOP but no explanation of why not. I used to live in that district, and it seems it would be a win-win to have the two areas with limited number of ratepayers combine forces to spread costs and it's the closest treatment plant to Occidental as well.

<http://www.sonomacountygazette.com/cms/pages/sonoma-county-news-article-6333.html>

Thanks,
Rebecca

Rebecca Radtke

From: [M. Davison](#)
To: [Jeff Church](#)
Cc: [Suzanne Doyle](#)
Subject: Sierra Club comments on OCSD NOP of Initial Study
Date: Friday, June 23, 2017 4:28:55 PM
Attachments: [62317 Sierra Club Sonoma Group comments on 2017 Occidental Wastewater Initial Study.pdf](#)

Mr. Church,

Attached is the comment letter submitted by Sierra Club Sonoma Group. Please direct responses or comments to me at this email address.

Thank you,

Mary Davison

Sierra Club Sonoma Group



**IERRA
CLUB**

! ! !
! ! !

SONOMA GROUP
P.O. Box 466, Santa Rosa, CA 95402
(707) 544-7651

June 23, 2017

Jeff Church
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403
Jeff.Church@scwa.ca.gov

Re: Notice of Preparation of Initial Study Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Plan

Dear Mr. Church,

Below are several points that we feel should be considered in the Initial Study.

1. Since the distance being traveled to the treatment plant is now more than double that of the Guerneville option, and will further increase greenhouse gases if conventional fueled vehicles are used, every effort should be made to utilize Alternative Fuel Vehicles, especially since the current indication is that this is being proposed as a long-term way to address the Occidental wastewater problem.
2. The proposed routes cross several creeks, including Purrington, Atascadero, Santa Rosa (near the Laguna de Santa Rosa) and Mark West. Please examine safety issues along the entire route in the study, and include mitigation, including potential modification of the roadway, if necessary, to prevent raw sewage spills. Although Graton Road, for example, has recently been paved, hazards still remain. Graton Road between Occidental and Graton is narrow and winding much of the way and often frequented by bicyclists. Furthermore, there has been some evidence of road slippage west of the intersection with Green Hill Road. Another worrisome spot is one mile west of Graton, where there is a 90° curve adjacent to where Graton Road crosses Purrington Creek. These are just a few instances of obvious potential problems.
3. Limiting stormwater incursions and increasing conservation efforts should remain a priority, since that would lead to a decrease in the number of trips per day required to transport the raw sewage. Please include in the Initial Study a detailed examination of the source of the stormwater incursions, including how much is being added per inch of rainwater directly into the storage ponds, and consider the feasibility of covering the storage ponds if this would provide a substantial advantage.

4. The impact of removing water from the local watershed, especially given the local water restrictions that occurred during the recent drought and the negative impact of the drought on Dutch Bill Creek, should be considered in the Initial Study. A mechanism should be included in the Initial Study to seek financial resources at the state and federal level in an ongoing manner for a permanent solution that would ideally include Camp Meeker because of its failed septic systems.

! Sincerely,

! Mary Davison
! Sierra Club, Sonoma Group

! Suzanne Doyle
! Sierra Club, Sonoma Group Conservation Chair

The Inconvenient Facts Regarding This Project

Occidental County Sanitation District Wastewater Transport Compliance Project
by Bill Wadsworth 874-3348

Summary: This project transports Occidental's sewage in as many as 20 truckloads per day over 40 roundtrip miles along narrow poorly surfaced back roads. These trips elevate the CO² emissions of the treatment process. This unsustainable "solution" exacerbates climate change rather than alleviating it. If this climate unfriendly project is to be approved, certainly it must include a moratorium on any new development within the district. As the Sonoma County Water Agency subsidizes this flawed project to the tune of \$400,000 per year, it is, also, not financially sustainable. More development means more subsidies and there is no future guarantee regarding these subsidies.

Occidental has two interrelated problems. In addition to wastewater treatment problems, Occidental has a severe long-term potable water right shortfall. These two problems are red flags regarding future development. Continuing to overreach our water resources and sustainable effluent treatment will eventually harm Occidental's economy and quality of life. The time to stop this unsustainable development is now.

Inconvenient Facts:

- In the last fiscal year the Occidental CSD board has spent \$68,655 to engineering and law firms and others in attempts to get in compliance with its water right and water supply permits. The previous years potable water revenue was only \$67,173. After these excessive expenditures our board failed to get more than ten years of full water rights and its water rate decision has been challenged and will likely be overturned. Our board is recovering these extraordinary expenses via our new rates reflected in your recent water bills. We're paying extra to have new buildings for which we must provide water after 2035 when we won't have all the water.
- Apparently, money has influence in Sacramento. As our Occidental board has spent almost \$90,000 since 2014 on what many call lobbying activities, the Division of Drinking Water approved OCSD to add 18 new potable water connections. However, that approval doesn't change the fact that we have only a ten-year agreement to cover our water right shortfall. That shortfall problem is now the responsibility of us, the ratepayers, and our board as well as PRMD. As you know new buildings last and require water longer than ten years.
- To overcome our immediate shortfall, the Sonoma County Water Agency (SCWA) has signed an agreement to provide water to Occidental for only ten years. However, SCWA can't provide Occidental long-term water because it has overcommitted its 75,000 AFY of water rights by 16% by signing long-term agreements with its main contractors to provide 87,020 AFY in agreements that must be renewed in perpetuity for the amounts in the agreements. SCWA simply doesn't have the water to provide Occidental long-term water.
- In fact, SCWA reports in its 2015 Urban Water Management Plan that it will be using all of its 75,000 AFY by 2035. So sometime before 2035 SCWA will not be able to renew Occidental's water supply agreement and has no obligation to do so.
- Developers and supporters of unsustainable development like to wax on optimistically about "hoped for" water, but "hoped for" water in the age of climate change is like smoke in a windstorm. It can dissipate rapidly. Harmony

Village was built on “hoped for” water. Since the “hoped for” water fell short, we still must provide Harmony Village water which we don’t have long-term.

- Scientists at NASA and Cornell and Columbia universities have reported that climate models show an 80 percent chance of an extended drought between 2050 and 2099 in California, lasting more than three decades if world governments fail to act aggressively to mitigate the effects of climate change. The world governments via IPCC have agreed that global warming of more than 2°C would have serious consequences, such as an increase in the number of extreme climate events such as megadroughts. However, they have only reached agreement to reduce CO₂ emissions enough to limit the rise to a 3.5°C. As they must agree on reductions to decrease the rise by another 1.5°C, President Trump recently pulled the United States out of the IPCC Paris Agreement, which will seriously trump up the world governments in reaching their 2°C rise target. So this extraordinarily high 80% risk of a 30-year drought must be seriously considered as we make decision regarding future water resources. “Hoped for” water is exactly that, only hope. A tall glass of cold hope does little to quench your thirst.
- Our water permit restricts us from diverting water from the Russian River, our water source, when the flows on the river are below 140 cfs during the period November 1 through June 30. In addition, our Streambed Alteration Agreement is more restrictive by stopping diversions between July 1 and October 31 when flow is 85 cfs or under. We have only 3 days of non-fire storage. Historically, there have been many periods longer than 3 days when OCSA could not have diverted. Several were over a month long. As the number and length of these low flow periods will accelerate during a megadrought, Occidental will face very costly water hauling and most likely water rationing. Remember, due to water right limitations, we can’t count on SCWA’s water being available after 2035.
- Many of you and myself recall when Occidental used to pay extra to haul water when we pumped our reservoir dry due to our board’s unlawful development. That inconvenience is tiny compared with the hardship we will encounter in the future when faced with our water right shortfall during a megadrought when water to haul is scarce and expensive. Failing to have a sufficient water supply will harm our economy, property values, and quality of life. Our board has spent extravagantly and has not been able to solve this crucial water shortfall problem. The time to address this problem is now by stopping any further development.

Every person on earth, and particularly those of us in countries who generate such high levels of greenhouse gas emissions, have a responsibility to put our lives and our communities on a sustainable path regarding climate change.

We the people of Occidental can do much harm if we make ourselves the exception. If we decide that we’re the ones that don’t need to assume responsibility for our climate actions, we will not only harm our environment, but we will harm ourselves; hobble our own spiritual existence. Solving climate change will take all humans working together.

E. O. Wilson¹ the Harvard Evolutionary biologist advises, “The time to act is now. Those living today will either win the race against extinction or lose it for all time. They will earn either everlasting honor or everlasting contempt.” ¹ Two Pulitzer Prizes, National Medal of Science, and the Presidential Medal.

Act tonight or by 6/26/17 at 5 PM. See www.scwa.ca.gov/ocsd/ for details.

Comment to Notice of Preparation

COPY
ORIGINAL DOCUMENT
JUN 26 2017
SONOMA COUNTY WATER AGENCY

Project: Occidental County Sanitation
District Wastewater Transport
Compliance Project
To: Jeff Church, Sonoma County
Water Agency
From: Bill Wadsworth
Date: 6/27/2017

To: Church
Proj/Occidental CSD to A-L-W SZ
Wastewater Transport 70-704-7 #P1
Bill Wadsworth - Communications

I provide this comment regarding the Notice of Preparation (NOP) to develop an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project.

Concern Summary: This project transports Occidental's sewage in as many as 20 truckloads per day over 40 roundtrip miles along narrow poorly surfaced back roads. These trips elevate the CO₂ emissions of the treatment process considerably, a very serious problem in the age of climate change. This unsustainable "solution" exacerbates climate change rather than alleviating it. It's a step in the wrong direction if we, as world citizens, are to reach the IPCC 2°C target. If this climate unfriendly project is to be approved, certainly it must include a moratorium on any new development within the district. More buildings mean more wastewater to transport and treat, increasing the harm to the environment that this project creates.

As the Sonoma County Water Agency subsidizes this flawed project to the tune of \$400,000 per year, the project is, also, not financially sustainable. More development means more subsidies and there is no future guarantee regarding these subsidies.

Occidental has two interrelated problems. In addition to wastewater treatment problems, Occidental has a severe long-term potable water right shortfall. This water supply shortfall must be considered as an exacerbating problem when evaluating the Wastewater Transport Project (WTP). As the Occidental Community Service District (OCSD) board adds new buildings to its potable water system this increases wastewater treatment volumes. These two problems in tandem are red flags regarding future development. Occidental has a decades long history of developing beyond its water supply resources and wastewater treatment capabilities and than unlawfully diverting water to provide water to the new buildings as the wastewater from the new buildings exacerbates its wastewater treatment problems. These practices are harmful to the environment, are irresponsible water management practices, and must be stopped to forestall continued harm to the environment.

These unlawful development practices have historically harmed the aquatic life including the Salmon, an endangered species, in both Salmon Creek and Dutch Bill

Creek. For decades the OCSD board diverted as much as twice the amount of its allowed water right from a tributary of the Salmon Creek, which reduced the flow in the creek, and which exacerbated efforts to restore Salmon to Salmon Creek. Studies of flows in Dutch Bill Creek have documented the importance of trickle flow to Salmon rehabilitation. See page 9-12 in attached PDF. I call your attention to this historical practice of harming the environment by adding buildings to Occidental's failed treatment system to underscore that this new project, which, also, has added environmental harm must not allow new buildings to be added.

The Occidental County Sanitation District (Sanitation District) received its first Cease and Desist order in 1997 for the discharge of waste from its treatment plant into Dutch Bill Creek. It has continued to periodically make such discharges since that date as it has added new buildings to its system. These discharges harm the aquatic life in the creek and exacerbate efforts to restore Salmon to Dutch Bill Creek. To continue this ongoing environmentally destructive practice of continuing to develop, as Occidental replaces its failed system with another treatment process that, also, adds unnecessary harm to the environment is not an effective solution. This is particularly harmful if new buildings are added to the new system.

The ETP may reduce the Sanitation District's harmful discharges into the creek, but we point out that it likely will not stop the discharges. In addition, it falls short of being an environmentally effective method of treating sewage due to the additional amounts of CO₂ emissions it will release due to the number of transport miles added to the treatment process. When evaluating the ETP's added CO₂ emissions it must be evaluated against a new energy efficient local community treatment facility. Pursuing this ETP solution will slow down or stop the best environmental solution to this problem, which is a local energy efficient community system. Until such a system is in place there must be a moratorium on any new building construction in the service area.

For Occidental to continue to overreach its water resources and sustainable effluent treatment by adding new buildings to its systems will not let Occidental reduce the harm it is doing to the environment and will eventually harm Occidental's economy and quality of life.

Green Valley & Dutch Bill Watershed Update

[See page 12](#)

Integrated Groundwater and Surface Water Study for Watershed Restoration Planning

Background

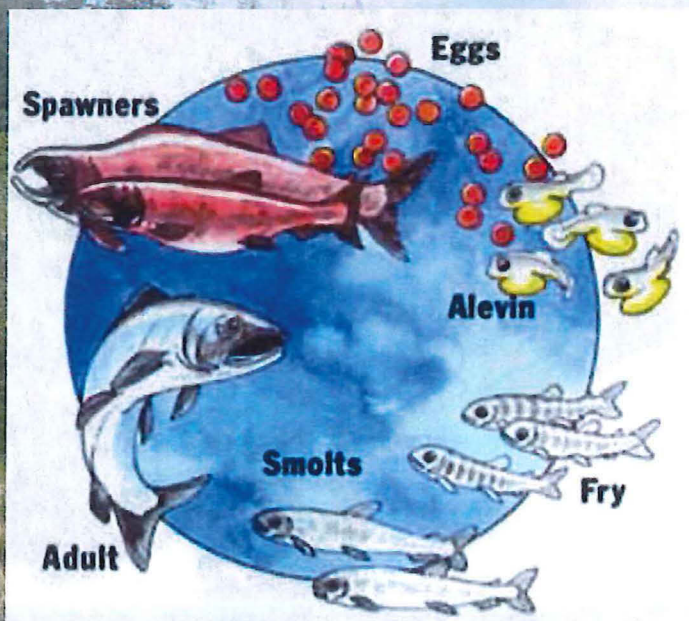
The Dutch Bill and Green Valley/Atascadero Creek watersheds provide some of the best remaining habitat for endangered coho salmon in the greater Russian River watershed. Low stream flows during the summer months are an important factor affecting the survival and recovery of the species. Salmon require sufficient water in the creeks for migrating in from the ocean to their breeding habitat, spawning, developing eggs, rearing young, and migrating back out of the streams to the ocean. Juvenile coho salmon live in creeks for over a year before migrating to the ocean, so they must survive through the summer during periods of low stream flow (Figure 1). In light of recent drought conditions, ongoing climate change, and an increasing demand for water, developing strategies to protect and increase stream flows while having enough water to meet human needs is critically important for sustaining coho in these watersheds.

A four-year scientific study has been completed by the Gold Ridge Resource Conservation District and O'Connor Environmental to gain a better understanding of how stream flows vary across the watersheds and over time, how various natural and man-made factors influence these flows, and what actions can be taken to improve flows and habitat conditions for coho. The study provides a wealth of information and tools for understanding watershed conditions and assisting local stakeholders in sustainably managing water resources and restoring coho populations.

Figure 1:

The Coho Life Cycle

Adults enter the streams during high winter flows and travel throughout the watershed. In our streams, adults mate, spawn, and die. Eggs develop into young who spend a little over one year in freshwater streams. Juvenile smolts migrate down in spring to spend two years in the ocean. In the winter of their third year, they return.



Approach

A major component of the project was the development of a detailed watershed hydrologic model. The model takes into account many of the physical attributes of the watershed, including information about the topography, climate, vegetation, soils, and geology, as well as man-made influences such as urban drainage systems, ponds, water diversions and groundwater wells. The model uses mathematical equations to simulate the movement of water through the various phases of the water cycle including rainfall, water use by plants, soil water, groundwater, and stream flow (Figures 2 and 3). The model has been calibrated to real-world measurements of stream flow and groundwater elevations at various locations throughout the watersheds and it provides estimates of how the various components of the water cycle vary in time and space. We used the model to simulate how drought and streamflow augmentation from existing reservoirs would impact the quantity and timing of stream flow in the study watersheds. The model is well suited for further investigation of the effects of wells, stream diversions, flow augmentation, management of groundwater recharge, land use change, and climate change on stream flow.

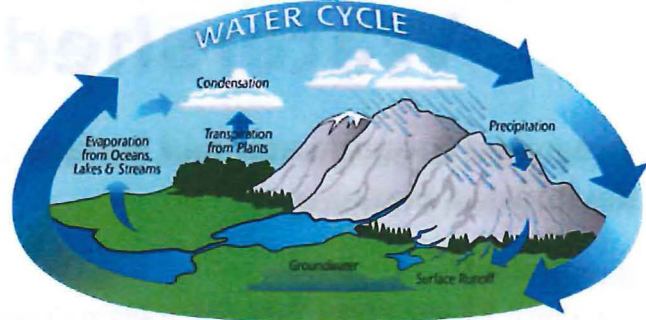
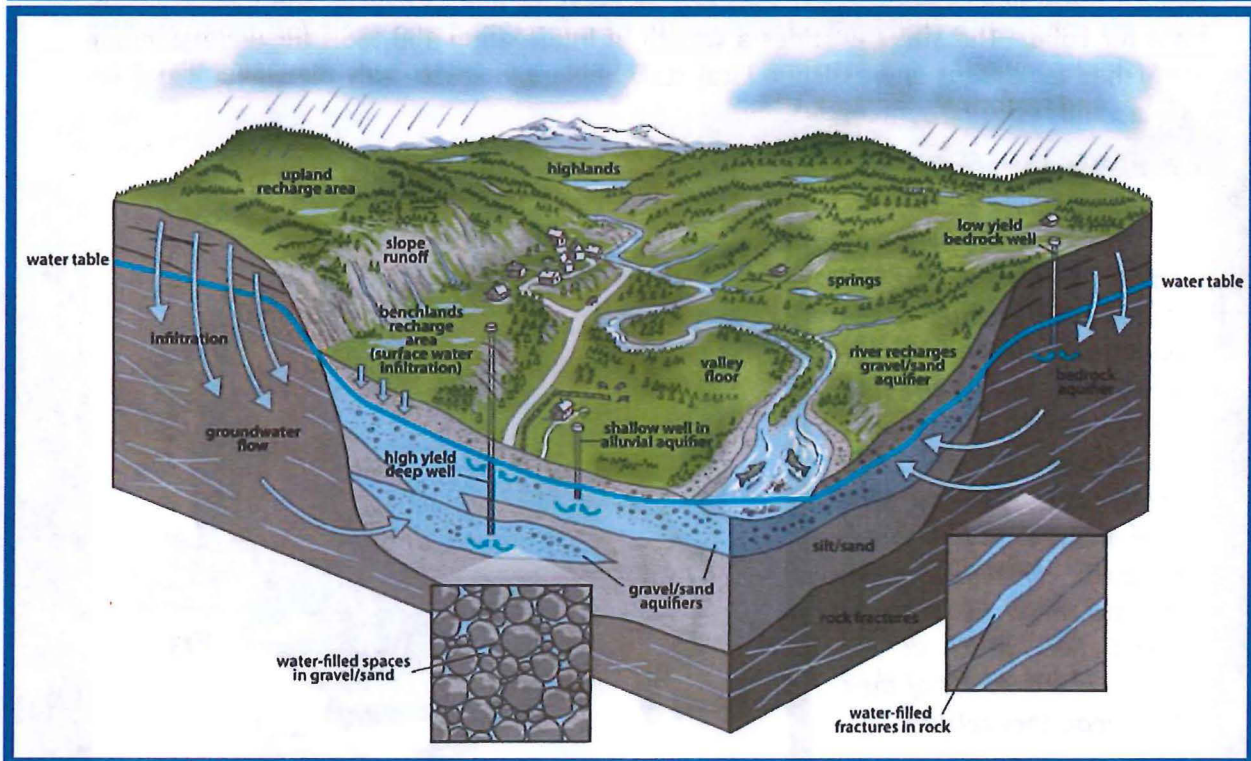


Figure 2 (above): Diagram showing the major components of the water cycle.

Figure 3 (below): Diagram shows many of the hydrologic processes and elements evaluated in the study.



Overview of the Watersheds

The Dutch Bill Creek and Green Valley/Atascadero Creek Watersheds cover a 50-square-mile (32,000 acre) area of western Sonoma County, including portions of the communities of Sebastopol, Graton, Forestville, Occidental, Camp Meeker, and Monte Rio. The watershed map shows town and city limits, the main streams and tributaries, and five sub-watershed areas. Dutch Bill Creek is a distinct and separate watershed from Green Valley Creek, which includes four major sub-watersheds: Lower and Upper Green Valley Creek and Lower and Upper Atascadero Creek.

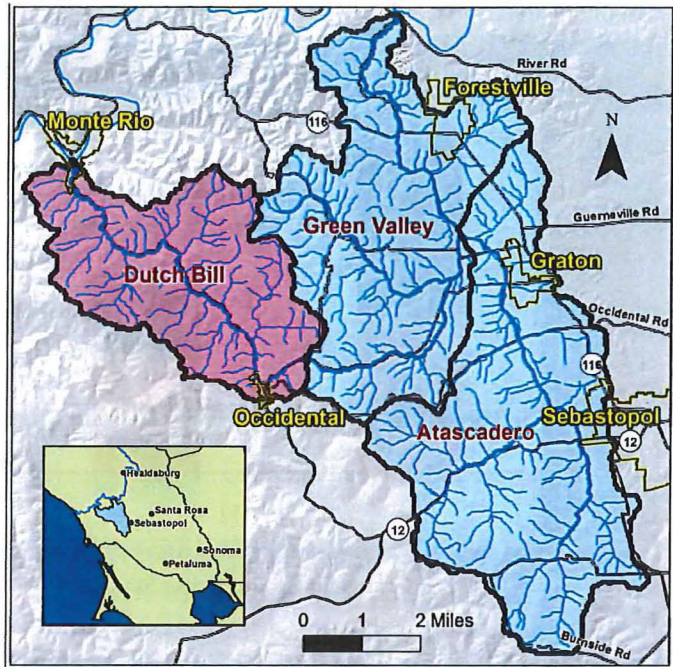
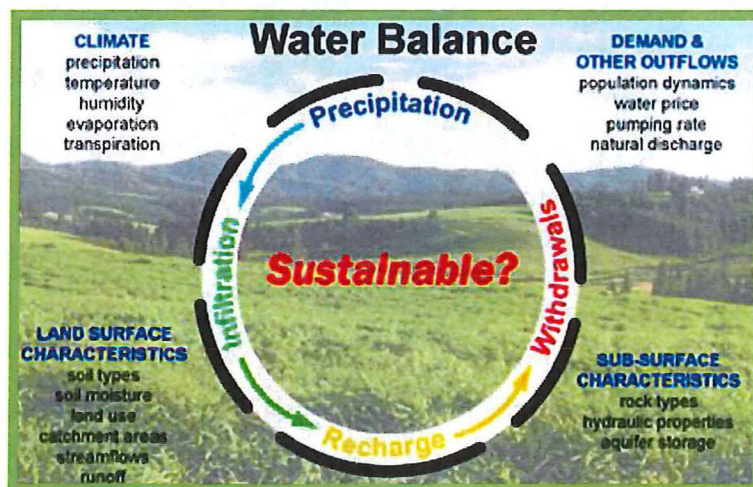


Figure 4: The study area includes both Dutch Bill Creek Watershed (pink) and Green Valley Atascadero Creek Watershed (blue).

Mean annual rainfall varies from about 40 inches per year on the east side of the Green Valley Atascadero Creek Watershed to 60 inches per year on the west side of the Dutch Bill Creek Watershed. Land cover in the two watersheds consists primarily of forests, vineyards, grasslands, orchards and rural residential parcels. Soils range in texture from sandy and gravelly loams to clays and clay loams. There are two major geologic units in the study area (Figure 8). The Wilson Grove Formation is sandstone which underlies most of Atascadero Creek watershed and southeastern portions of Green Valley Creek watershed. The second major geologic unit is the Franciscan Complex underlying the Dutch Bill Creek Watershed (DBC) and the northwestern portions of the Green Valley Creek Watershed (GVAC).



Water Balance

A water balance (or water budget) is a method used by hydrologists to analyze how water entering a watershed as rainfall is distributed between watershed outputs (e.g. stream flow and use by plants), human use, and storage in groundwater. With the hydrologic model we developed annual water balances for the GVAC and DBC watersheds which show that most of the water entering these areas as rainfall either runs off as stream flow or is returned to the atmosphere by

evaporation from the soil and transpiration by plants (evapotranspiration). The relative amounts of stream flow and evapotranspiration vary from year to year, depending on annual rainfall. For example, under drought conditions such as occurred in 2014 with rainfall of about 30 to 35 inches, stream flow made up a smaller proportion of the water leaving the study area than did evapotranspiration, while in average years with rainfall of 50 to 53 inches such as 2010, the reverse is true.

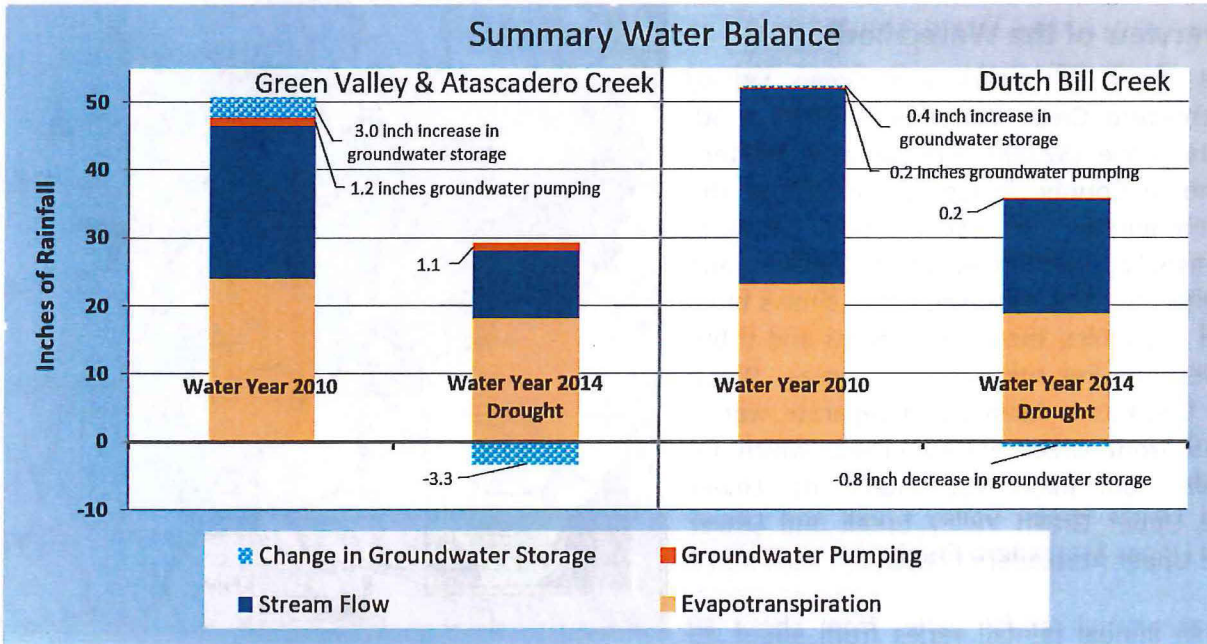


Figure 5: Annual water balances for the GVAC and DBC watersheds.

Annual groundwater pumping from wells represents a small fraction of the annual water balance (Figure 5). Groundwater use in GVAC is equivalent to 1.2 inches of rainfall across the watershed; in DBC, groundwater use is equivalent to 0.2 inches of rainfall. The low rate of use of groundwater in DBD reflects the limited availability of groundwater in the Franciscan bedrock. During years of average rainfall such as 2010 there is a net increase in the amount of stored groundwater (3.0 inches in GVAC and 0.4 inches in DBC) while in drought years such as 2014, there is a net decrease in groundwater storage (-3.3 inches in GVAC and -0.8 inches in DBC). A decline in water table elevation is associated with the decline in groundwater storage, and this creates potential negative impacts on summer stream flow and coho habitat. Although groundwater use is a small component of the annual water budget, it is possible that pumping groundwater from wells could affect water table elevation that in turn affects stream flow, particularly during the summer and in drought years.

Increases and decreases in groundwater storage tend to balance out over many years unless the amount of groundwater use consistently exceeds groundwater recharge, creating overdraft conditions. Model simulations of groundwater cover the five-year period beginning in October 2009 and ending in September 2014. The first two years were aver-

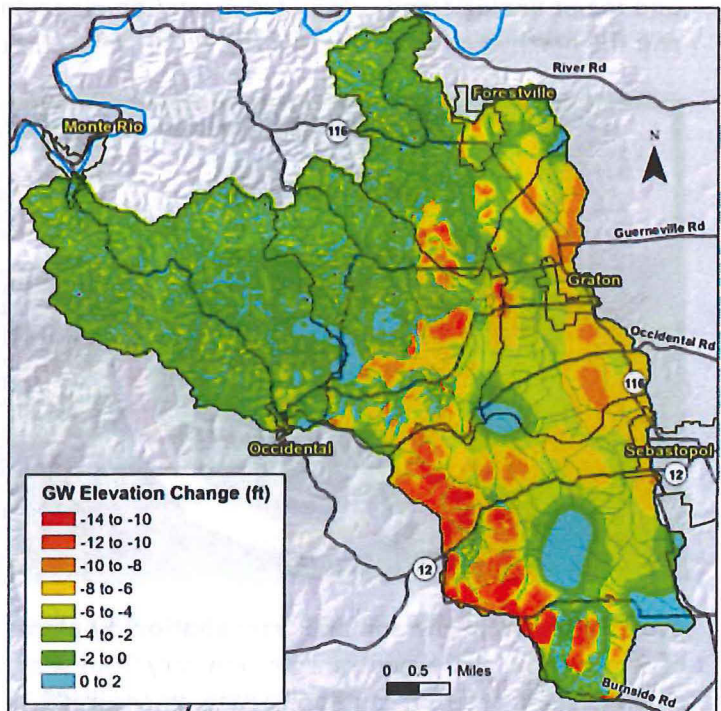


Figure 6: Simulated change in depth to groundwater between 2009 and 2014.

age or wet years and were followed by three consecutive dry years, part of the historic statewide drought that continued through 2015.

The model simulations indicate accumulated reductions in groundwater storage during the drought, but they also indicate that normal rainfall conditions would be expected to replenish groundwater storage. The reductions in groundwater storage manifested as small decreases in groundwater elevations in most areas and modest decreases of up to 14 -ft in other areas such as upper Atascadero Creek (Figure 6). **In other words, the drought created short-term groundwater overdraft, but the model simulations suggest that long-term groundwater overdraft under current climate and water use conditions is NOT occurring.**

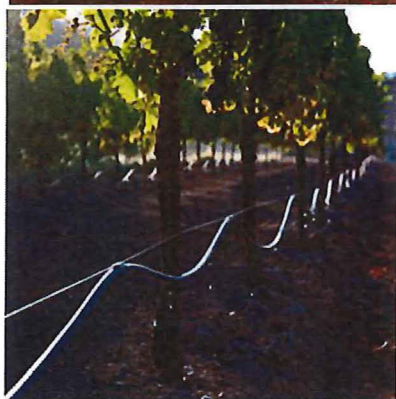
Water Use

Water use rates used in the model were estimated from available data. Water use in this study is divided into three categories: vineyard irrigation, vineyard frost protection, and domestic (Table 1 & Figure 7). Domestic use includes both indoor household use and outdoor irrigation of gardens and landscaping. Water use for other agricultural purposes simulated in the model are very small; it is assumed that orchards are not irrigated. Legal or illegal cannabis grown in the region was unknown so not taken into account. Use of surface water diverted from streams for agriculture and water imported by public water suppliers was accounted for first, and the remaining demand for water was assumed to be satisfied by pumping groundwater from wells.

The majority of the water use in both watersheds comes from groundwater sources. Surface water diverted from streams under terms of existing water rights represents a relatively small amount of annual water use compared to groundwater pumped from wells in the GVAC watershed (Table 1). In Atascadero Creek about 85 acre-feet per year is diverted from streams, representing 5% of the total water use in the watershed. In Green Valley Creek watershed about 130 acre-feet per year is diverted from streams, representing about 15% of the total water use in the watershed. In Dutch Bill Creek, 115 acre-feet per year is diverted from streams, representing about 41% of the total water use. Stream diversions locations and rates were obtained in 2013 from the State water rights public database. The model development preceded the State emergency conservation and information order issued in 2015.

Agricultural Use

The annual vineyard irrigation rate was estimated to be 0.3 acre-feet per acre per year of vineyard (equivalent to 3.6 inches of applied water) based on the average use reported for stream diversions for vineyard irrigation allowed by water rights permits. All vineyards are assumed to be irrigated using this average rate which is consistent with the extent of dry-farmed vineyards and low irrigation rates in coastal Sonoma County (the average irrigation rate in Sonoma County is about 0.5 acre-feet per acre of vineyard, equivalent to 6 inches of applied water). Water for irrigation of vineyards with no surface water rights was assumed to be supplied by private wells. **Mean annual water**



use for frost protection was estimated based on available climate data and frost protection system information obtained from County permit data specific to each vineyard.

Domestic Use

A significant portion of the domestic water used in the study area is obtained from outside the watershed and provided to residents by public water supply agencies serving Sebastopol, Forestville, Monte Rio, and portions of Camp Meeker and Occidental. Based on 2010 census data, 4,465 residents of the study area obtain water from such public supplies. The remaining 10,651 residents obtain domestic water from

groundwater wells. Domestic water use from private wells was estimated based on census data and City of Sebastopol water use data for 2010 through 2013. Mean annual per capita use was estimated at 129 gallons per person per day, of which 46% (59 gallons per person per day) is indoor use.

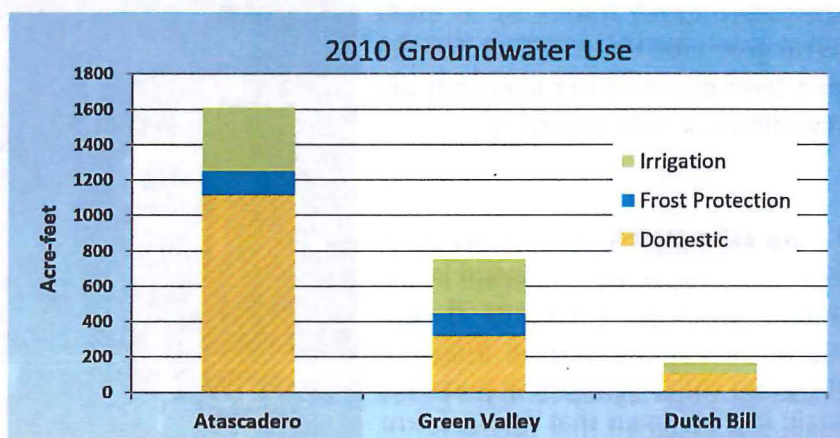


Figure 7: Breakdown of total annual groundwater use by type of use, units are acre-feet per year.

Watershed	Drainage Area (acres)	Population Served by Wells	Vineyard Acres Served by Wells	2010 Groundwater Use (acre-feet)			Surface Water Diversions Reported to SWRCB (acre-feet)
				Irrigation	Frost	Domestic	
Atascadero	12,961	7,660	1,187	359	138	1,112	85
Green Valley	11,361	2,261	1,013	306	131	328	130
Dutch Bill	7,654	730	201	61	0	106	115
Total	31,976	10,651	2,401	726	269	1,546	330

Table 1: Breakdown of annual surface water and groundwater use by sub-watershed.

Groundwater

Most groundwater is pumped from the Wilson Grove Formation, which underlies Atascadero Creek and the southeastern portion of the Green Valley Creek watershed (Figure 8). The thickness of the Wilson Grove Formation increases from west to east from less than 50-ft thick east of Occidental to more than 600-ft thick in the Sebastopol area. Groundwater is also pumped from fractures within rocks of the Franciscan Complex, which underlies all of DBC and the northwestern portion of Green Valley Creek. This source of groundwater is relatively limited compared to groundwater in the Wilson Grove Formation sandstone. The Wilson Grove Formation is a significant source of groundwater; municipal wells operated by the City of Sebastopol drilled in the Laguna de Santa Rosa watershed pump groundwater from the Wilson Grove Formation. Alluvium (sediments deposited by streams) is also present along the major streams in the study area, and many groundwater wells are located to pump water from it. In general the alluvium contains large amounts of

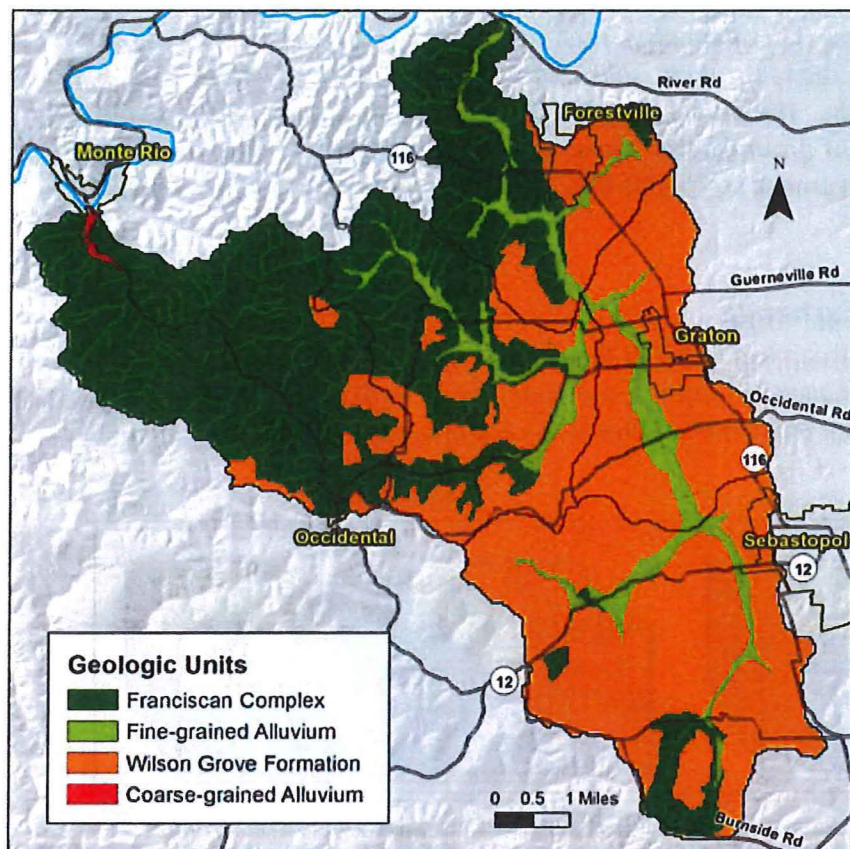
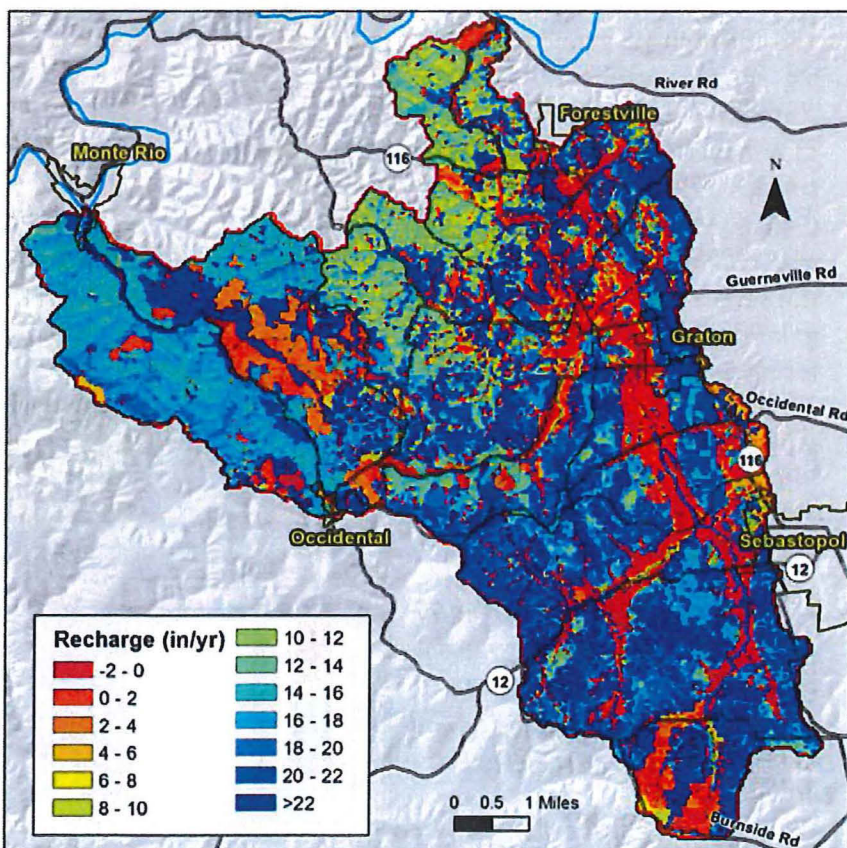


Figure 8: Major geologic units.

average rainfall years, the mean groundwater recharge rate is about 10 inches per year in the GVAC watershed and about half that in the DBC watershed (Figure 9). Under drought conditions, average recharge is about 2 inches per year. Infiltration of stream flow through stream beds in normal rainfall years is about 6.4 inches per year in GVAC and only about 1 inch in DBC. In drought years, stream bed infiltration declines to 4.8 inches in GVAC, but

Figure 9: Simulated annual groundwater recharge rate in units of inches per year. Blue areas have high potential recharge rates because of sandy-gravelly soils. Red and orange areas have low potential recharge rates because of clay-rich soils. Recharge rates are also influenced by variations in rainfall, land cover, and geology.



silt and clay, is relatively thin, and is not a major source of groundwater. In some areas, however, such as lower Purring-ton and Atascadero Creeks, the alluvium reaches thickness of more than 100-ft. The alluvium in lower Dutch Bill Creek is much coarser containing large amounts of sand and gravel.

Groundwater stored in our watersheds is replenished by percolation of rainfall through soils and by infiltration through creek beds. The study identified areas where soils with abundant sand and gravel (typically in uplands) are capable of high rates of infiltration of rainfall, as well as clay-rich soils (typically in low-lying floodplains) where infiltration rates are low. During

increases somewhat in DBC. It is desirable to maintain recharge processes by constructing percolation ponds or otherwise managing rainfall, runoff, soils and vegetation in areas where soils and bedrock are favorable for percolation. **The model provides an objective starting point for identifying locations where management of groundwater recharge is most important. The model can also be used to develop land management strategies that would maintain and enhance recharge processes.**

Surface Water/Groundwater Exchange

Water flows from groundwater to streams in much of the watershed, maintaining year-round flow in some areas (gaining streams). However in other areas water flows from streams to groundwater (losing streams), sometimes to the point that surface flows disappear, along with fish habitat.

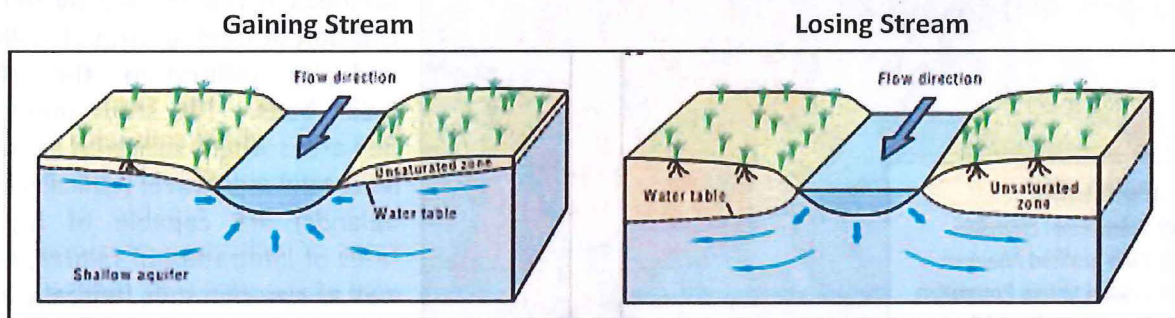
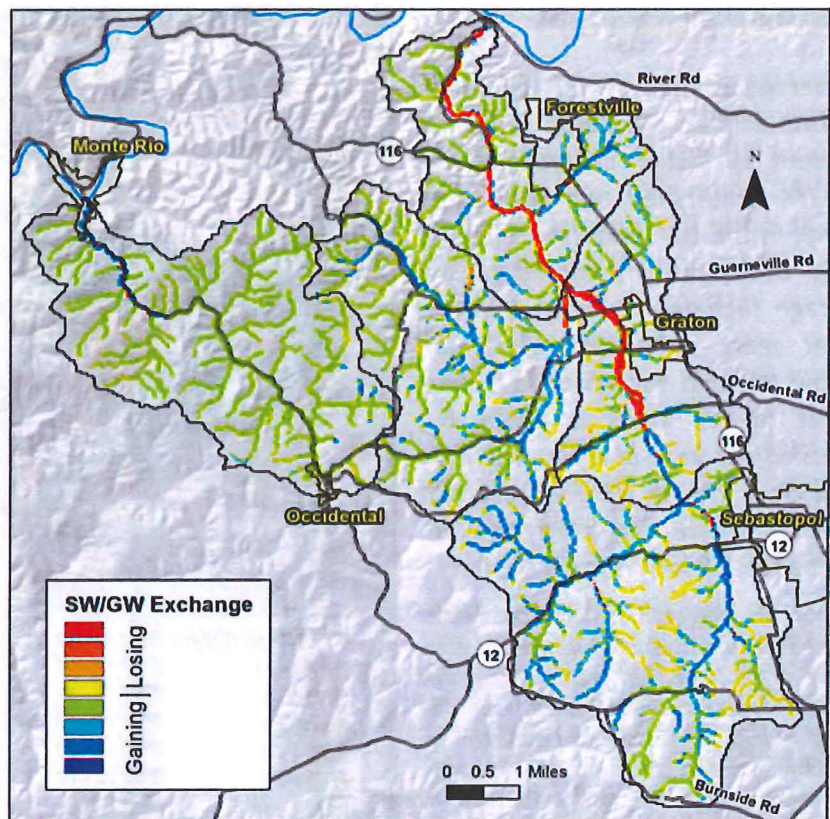


Figure 10: Diagram showing how surface water and groundwater interact in gaining and losing streams.

The location of gaining and losing reaches varies through the watershed as shown in the map of annual net exchange between surface water and groundwater (Figure 11). The exchange can also change seasonally such that the same stream location may be gaining during one season and losing in another. Stream flow conditions during summer at any given location are determined by inflows from upstream and the height of the water table adjacent to the stream.

In many portions of the GVAC watershed, groundwater that can be exchanged with stream

Figure 11: Annual exchange between surface water (SW) and groundwater (GW).



flow may be in alluvial deposits that are separated from the underlying Wilson Grove Formation by thick layers of clay. In these and other hydrogeologic circumstances, groundwater pumping from wells near streams might have little or no effect on stream flow conditions. On the other hand, pumping groundwater from shallow wells near streams could potentially have significant effects on stream flow.

Seasonal Stream Flow Conditions

To learn more about where and when water is available, particularly in creeks where coho salmon could live, the study utilized the hydrologic model to examine groundwater and surface water conditions across the watersheds and through time. The water balance for GVAC watershed described previously on an annual basis can be viewed monthly for the period October 2009 through September 2014 (Figure 13); this graph emphasizes the Mediterranean climate cycle of wet winters and dry summers with low stream flow. The amount of water flowing in streams varies widely from winter to summer with the highest flows occurring during rain storms and declining at various rates through the spring and summer depending largely on the exchange between groundwater and surface water. Portions of the graph showing negative recharge are indicative of groundwater discharge to wetland areas primarily located along portions of Atascadero Creek.

As shown in Figure 12, small but significant flows are maintained year-round where upstream inflows from groundwater are substantial and the stream bed sediment and underlying rock do not permit high rates of losses to groundwater, such as lower Purrington Creek, lower Green Valley Creek, portions of West Fork Atascadero Creek and the middle reaches of Dutch Bill Creek. In streams where upstream groundwater transfers to surface water are relatively low and where the stream bed sediment is comprised of thicker layers of sand and gravel, surface flows tend to disappear in the summer (for example, lower Dutch Bill Creek near Monte Rio and portions of Atascadero and Green Valley Creeks between Graton and Forestville).

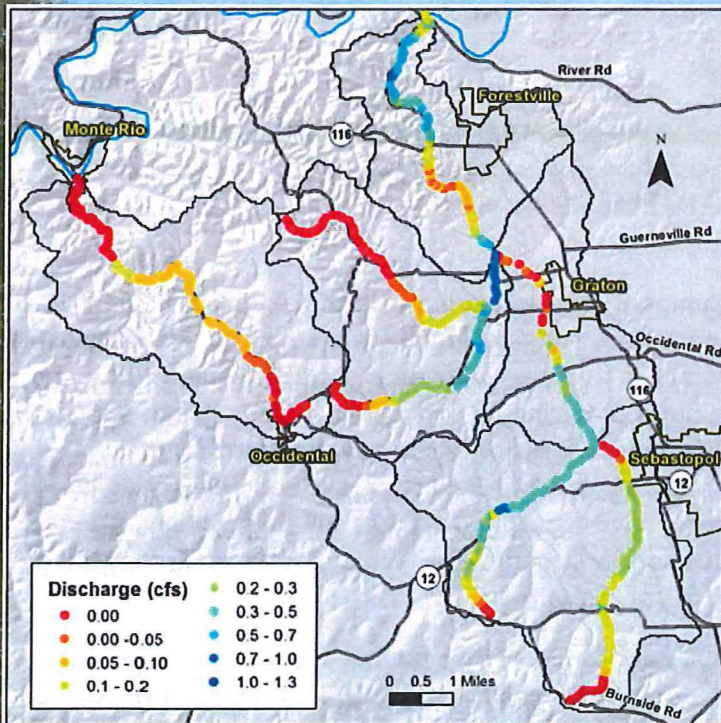


Figure 12: Minimum stream flow or discharge in units of cubic feet per second (cfs) during an average water year (2010).

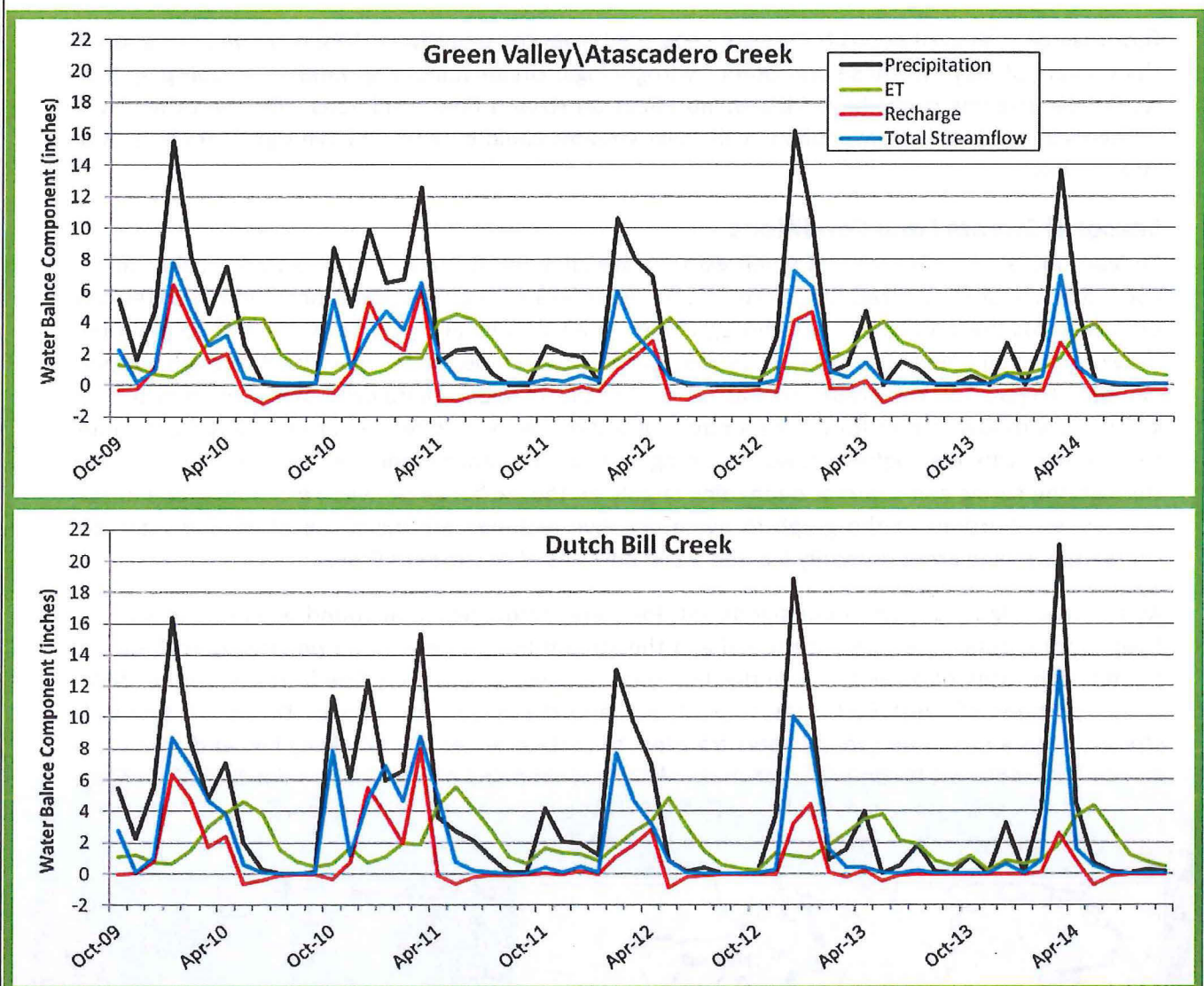


Figure 13: Monthly water balances showing the seasonal and annual variations in rainfall, recharge, evapotranspiration (ET), and stream flow in the GVAC and DBC watersheds.

Habitat Improvement Opportunities

During late summer, the survival of coho salmon is threatened because the extent of habitat defined in terms of quantity of stream flow and surface connectivity of stream flow dramatically declines throughout the watersheds. This occurs in average years and is much worse in drought years. Where stream flows diminish to the point of having no surface flow, coho cannot survive. Where surface flows diminish significantly but deeper areas of the stream (i.e. pools) remain filled with water, coho may survive but habitat is marginal at best. Field studies of coho by University of California Cooperative Extension fish biologists have found that habitat suitability declines when surface flows connecting pools disappear due to low stream flows. When pools are disconnected for more than a few days, coho are at a high risk of mortality.

In an average year, flows are sufficient to maintain connectivity between pools and provide suitable (though not optimal) habitat in about 16.2 stream miles in the study area (Figure 14). During

drought, the total habitat area decreases to about 12.8 stream miles. Stream flow simulations corroborated by field observations and flow data indicate that certain stream reaches tend to have persistent flows that maintain higher quality habitat (for example, the middle reaches of Dutch Bill and Purrington Creeks), while other stream reaches tend to have more frequent and extensive interruptions of surface flows and pool habitat or complete loss of surface flow (for example, upper Green Valley Creek).

Coho habitat in the study area was systematically evaluated and classified based on the persistence and depth of stream flow during late summer determined by flow simulations. These classifications of flow conditions provide the basis for prioritization of recommended locations and objectives of coho habitat restoration activities (Figure 14).

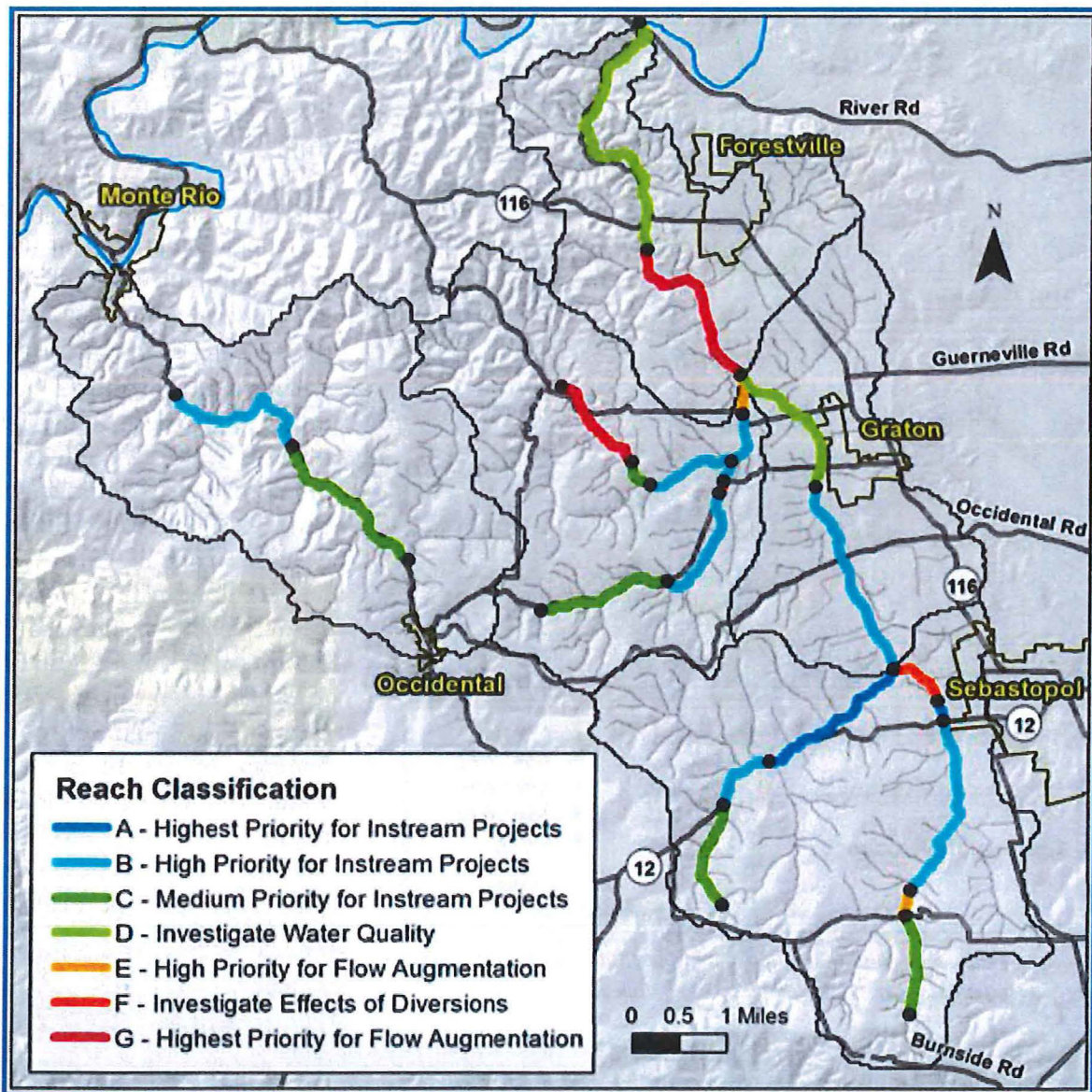


Figure 14: Coho habitat classification based on simulated flow conditions and associated restoration recommendations.

Highest quality habitat (Reaches A & B): Stream flow persists even during drought conditions providing suitable flows for coho summer rearing habitat.

Marginal quality habitat (Reaches C, D, E, & G): Late summer stream flow is very low and pools may become disconnected from surface flow. These reaches are critically sensitive to the effects of drought, and inconsistent flow may severely curtail coho summer rearing habitat.

Habitat potentially impacted by diversions (Reach F): These reaches have the potential to be high quality habitat, but utilization of water rights under existing licenses has the potential to significantly diminish stream flow and coho habitat.

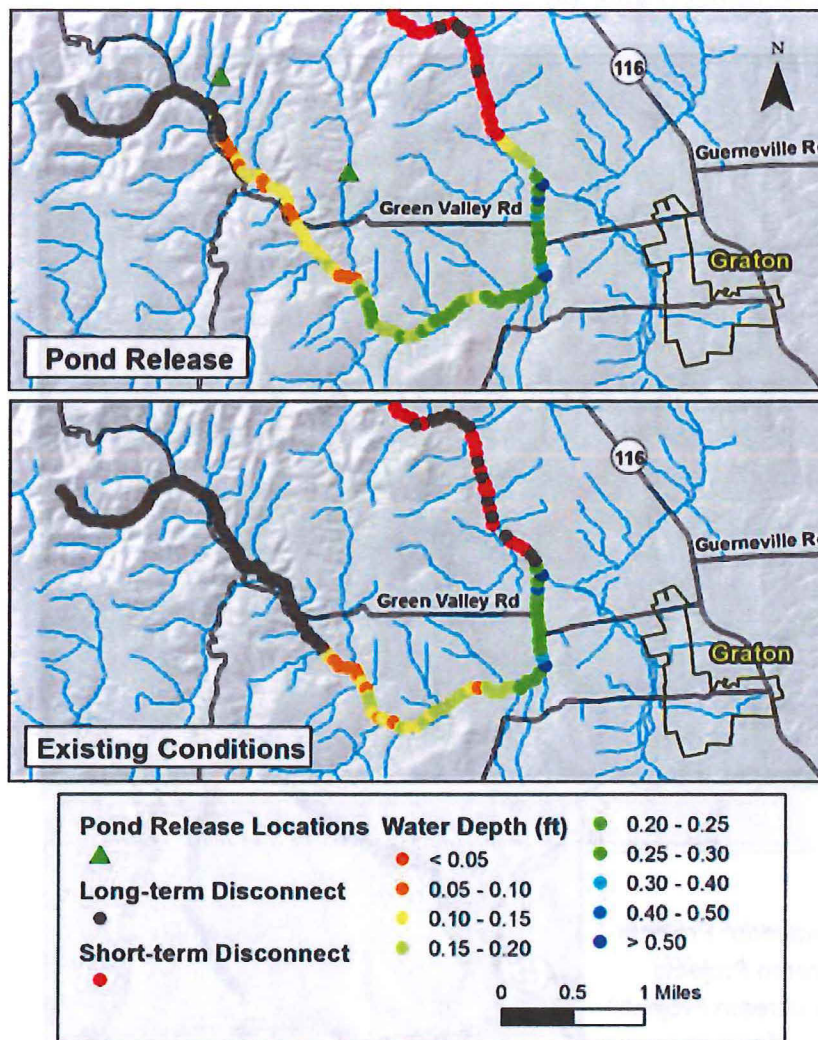


Figure 15: Increases in water depth and extent of suitable habitat resulting from releasing water from ponds in upper Green Valley Creek.

Stream Flow Augmentation

The effectiveness of releasing water back to the creeks from reservoirs was tested using the model. We simulated the release of 0.6 cubic feet per second (cfs) of water (equivalent to about one acre-foot in one day) from two ponds in upper Green Valley Creek. The model indicated that these reservoir releases were very effective at improving streamflow and surface connectivity during drought conditions. These modest flow releases resulted in a two-fold increase in the extent of suitable habitat in upper Green Valley Creek (Figure 15). Based on these findings, efforts to provide water from ponds should be pursued as an effective means to improve flow conditions for coho, particularly during droughts.

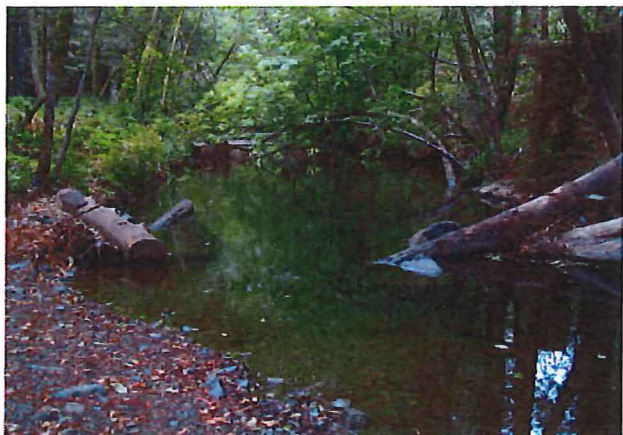
Management Recommendations

Highest quality habitat (A and B reaches): Since stream flow in these reaches is not critically limiting coho summer rearing habitat, projects that enhance in-stream habitat are appropriate under existing conditions. Coho habitat can be improved with projects such as restoration of native riparian vegetation, installing large woody debris for fish shelter and improved depth and cover, and constructing off-channel pools or wetlands for juvenile fish habitat.

Marginal quality habitat (C, D, E and G reaches): Increase the amount of water entering these reaches by releasing water from existing or new storage facilities during the summer. Conduct further study of potential effects of wells on stream flow using the model with new well data. Summer release of water that was collected during the winter can significantly improve flow and habitat in these reaches. Projects that could enhance stream flow in these reaches are a high priority. Habitat enhancement projects to improve rearing habitat may have lower priority, but could be appropriate particularly if successful flow enhancement projects are implemented.

Potentially impacted by diversions (F reaches): Operations of diversions should be evaluated with respect to potential impacts on stream flow and habitat. Management strategies for operation of diversions to avoid impacts to habitat should be identified and their adoption should be encouraged. If appropriate, the feasibility of developing alternatives to direct stream diversion (for example, building new water storage facilities) should be investigated.

Investigate coho habitat potential in Atascadero Creek: The study revealed that more than eight miles of upper Atascadero Creek have flow conditions that are suitable for providing coho habitat. Flow in the lowest two miles of Atascadero Creek stagnates, which likely degrades water quality. Additionally, dense wetland vegetation in this reach has encroached on the principal channels and could inhibit fish migration. Whether or not coho presently utilize Atascadero Creek is not known, but favorable flow conditions in the upper watershed suggest that if conditions in lower Atascadero Creek could be improved, it would be possible to significantly increase the extent of coho habitat in the study area.



An A-grade reach enhanced with large woody debris. Large wood installations add complexity to stream habitat over time, providing scour pools and cover for fish.



C-G grade reaches can be enhanced by increasing the amount of water flowing in the stream in the summer. Here, a landowner works with wildlife agencies to fill a pond with winter water that will be released at a slow rate into the stream in the summer.

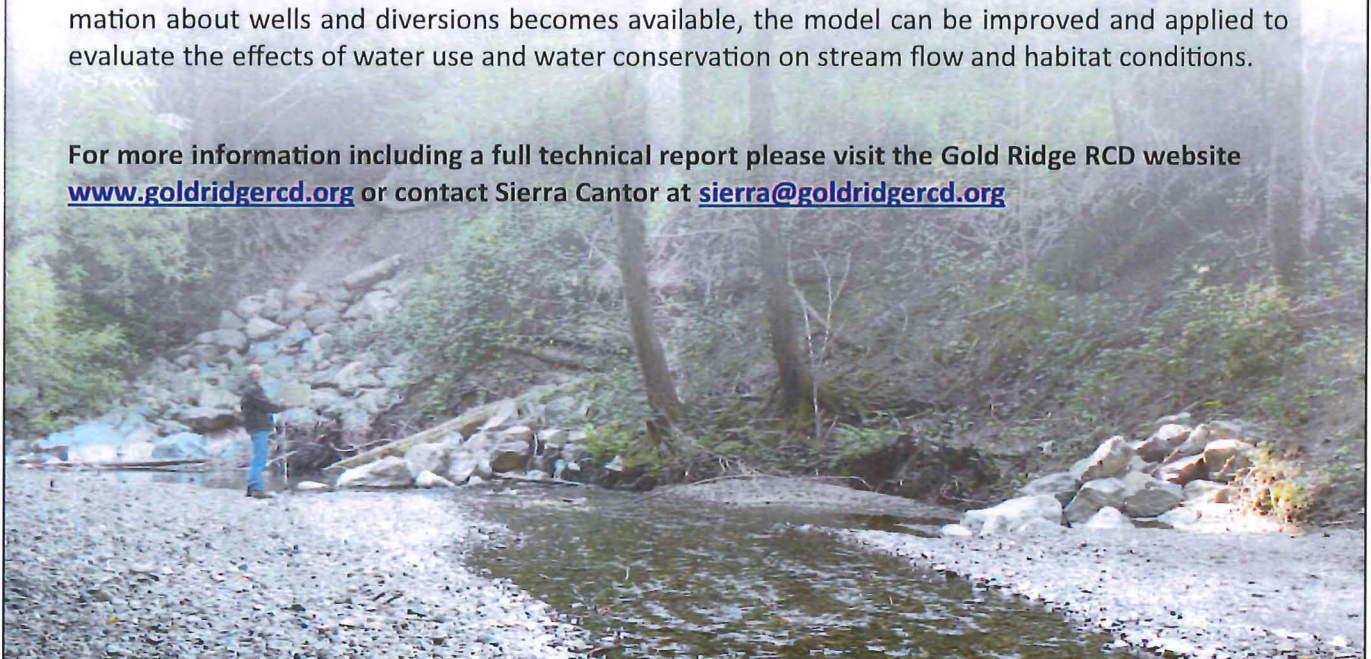
Conclusions

This study characterized the spatial and temporal variations in stream flow and groundwater conditions throughout the Dutch Bill and Green Valley/Atascadero Creek watersheds. Stream flow conditions were related to habitat requirements for juvenile coho in order to understand the variations in habitat suitability throughout the watersheds. The study identified reaches with suitable flow conditions where projects to enhance in-stream habitat would be most beneficial, reaches where flow conditions are marginal and where efforts to augment stream flows should be focused, and reaches potentially impacted by diversions. The study found that augmenting stream flows by releasing water from ponds has the potential to significantly enhance habitat conditions. Another key finding is that upper Atascadero Creek has the potential to provide significant habitat for coho but water quality and/or fish passage issues in the lower portions of the creek may be limiting use of the upper watershed.

In addition to characterizing coho habitat and making restoration recommendations, the study provides detailed hydrologic information for informing a wide variety of land and water use management efforts. For example, maps of groundwater recharge potential provide a valuable means of planning locations of projects designed to protect or enhance recharge processes. The study found that the recent drought resulted in modest declines in groundwater elevations and groundwater storage in some areas and significantly reduced groundwater recharge, summer stream flow, and extent of suitable coho habitat. These findings provide an important basis for understanding the resiliency of the watersheds in terms of maintaining stream flow, fish habitat, and water supply reliability.

Ideally this hydrologic study and its model will become a management tool. The “watershed atlas” produced by the simulation model can be used to inform water resources management now and into the future. A wealth of detailed information is available from the existing study that can be organized or evaluated to identify opportunities to promote groundwater recharge and to augment stream flow from existing or new reservoirs. In addition, the model can be used to evaluate impacts of climate change, increased water use, and changes in land use. As more detailed information about wells and diversions becomes available, the model can be improved and applied to evaluate the effects of water use and water conservation on stream flow and habitat conditions.

For more information including a full technical report please visit the Gold Ridge RCD website www.goldridgercd.org or contact Sierra Cantor at sierra@goldridgercd.org





YOCHA DEHE
CULTURAL RESOURCES

June 6, 2017

Sonoma County Water Agency
Attn: Jessica Martini-Lamb, Env'tl. Resources Mngr.
404 Aviation Boulevard
Santa Rosa, CA 95403-9019

RE: OCSD Wastewater Transport Project

Dear Ms. Martini-Lamb:

Thank you for your project notification letter dated, May 23, 2017, regarding cultural information on or near the proposed OCSD Wastewater Transport Project, Sonoma County. We appreciate your effort to contact us.

The Cultural Resources Department has reviewed the project and concluded that it is not within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we respectfully decline any comment on this project.

Should you have any questions, please feel free to contact the following individual:

James Sarmiento, Cultural Resources Manager
Yocha Dehe Wintun Nation
Office: (530) 723-0452, Email: jsarmiento@yochadehe-nsn.gov

Please refer to identification number YD - 05312017-02 in any correspondence concerning this project.

Thank you for providing us with this notice and the opportunity to comment.

Sincerely,

Marilyn Delgado
Cultural Resources Director

APPENDIX B

Archival Records Search Letters

Tom Origer & Associates

Archaeology / Historical Research

August 11, 2017

Jeff Church
Connie Munger-Barton
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403

Re: Archival Search Results for the Wastewater Treatment Facility at 14445 Occidental Road and Lift Station at 4200 Occidental-Camp Meeker Road, Occidental, for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project, Sonoma County, California.

Tom Origer & Associates completed archival research for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project. The study area is comprised of two locations: the Occidental County Sanitation District Wastewater Treatment Facility at 14445 Occidental Road (Area A) and the Lift Station at 4200 Occidental-Camp Meeker Road (Area B), Occidental, Sonoma County, California. A Sacred Lands File Check request was submitted to the Native American Heritage Commission on July 25, 2017. Research was completed at the Northwest Information Center (NWIC) of the California Historical Resources Information System on July 28, 2017 by Julia Franco, and encompassed lands within a half-mile of the study area. We also reviewed documents and maps pertinent to this project that are on file at our offices. This letter serves as a report of findings.

Archival Review

The Native American Heritage Commission replied via email on August 1st, stating that a Sacred Lands File check was completed for the study areas, and the files revealed no documented sacred sites within the study area.

Review at the NWIC (RS# 17-0195) found that neither Area A nor Area B has been previously studied. Table 1 lists the studies which have been conducted within a half-mile of the study areas. No cultural resources have been recorded within the study areas. There are six cultural resources and one resource district recorded within a half-mile of the study areas. None of these resources have the potential to extend into the study areas.

Ethnographic Review

At the time of European settlement, the study area was at the territorial boundary between lands controlled by the Coast Miwok and the Southern Pomo (Barrett 1908; McLendon and Oswalt 1978; Kelly 1978). Both groups were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites.

Table 1. Studies conducted within 1/2 mile of study area

Author	Year	S#
Beard	2012	39276
Berry	2000	26035
Bramlette	1986	8085
Collins <i>et al</i>	2004	29782
Flynn	1998	20387
Hallock	2013	44544
Havelka and Origer	2003	27401
Howell and Motl	1995	28696
Jacobszoon	1999	33337
Lang and Shultz	2010	38019
Lang and Shultz	2012	38802
Lopez-Cabral	1994	16067
Loyd and Beard	1999	22127
Newland	2001	23677
Origer	1999	22133
Origer	2005	30967
Sheeders	1980	2160
Waghorn	1999	22054

Primary village sites were occupied continually throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near sources of fresh water and in ecotones where plant life and animal life were diverse and abundant.

There are no reported ethnographic sites in the vicinity of the study areas (Barrett 1908; Kroeber 1925).

Historical Review

Historical maps show no buildings within the study areas (Bell and Heymans 1888; Bowers 1867; GLO 1868; McIntire and Lewis 1908; Reynolds and Proctor 1898; Thompson 1877). Topographic maps show no buildings within Area A, and no buildings within Area B prior to 1971 (USACE 1915, USGS 1935, 1942, 1954a, 1954b, 1971).

Environmental Review

The geology is shown as Wilson Grove Formation in Area A and Holocene to late Pleistocene alluvium in Area B (Delattre and Koehler 2009). Soils within the study area consist of Goldridge series soils in Area A and Hugo Josephine complex in Area B (Miller 1972:Sheet 79). Goldridge soils are moderately well-drained fine sandy loams found on uplands. The typical profile indicates that Goldridge soils reach a depth of approximately 72 inches. In an uncultivated state these soils support the growth of redwood, Douglas-fir, baywood, oaks, and some small shrubs and grasses. Historically, Goldridge soils were used for apple orchards and timber, with grassy areas used for range and pasture (Miller 1972:37). The Hugo Josephine complex consists of well-drained gravelly loams found on mountainous uplands. The typical

profile indicates that Hugo Josephine soils reach a depth of approximately 30 to 40 inches. In an uncultivated state these soils support the growth of redwood, Douglas-fir, California laurel, and an understory of associated hardwood species. Hugo Josephine complex soils are used mainly for timber and range and grazing where soils have been logged and cleared (Miller 1975: 47).

Cultural Resources Sensitivity

Factors in determining the potential for surface prehistoric archaeological sites include: distance to water, slope of the study area, and archaeological data (Meyer *et al.* 2017). Determinations of the potential for buried archaeological sites also factor in landform age, as buried prehistoric archaeological sites are typically found in or beneath Holocene-age deposits. Area A is nearly level and approximately 430 meters from the nearest water source. The geology of the Area A is made up of Wilson Grove Formation. This formation dates to over 2.58 million year ago, which predates human arrival and occupation of California. Area B is moderately sloping and adjacent to seasonal creek. The geology of Area B is made up of Late Pleistocene to Holocene deposits, which date from 126,000 years ago to the present.

Based on the factors above, the sensitivity for surface prehistoric archaeological sites is low in Area A and moderate in Area B. Map evidence suggests that the likelihood of encountering historical archaeological sites is low in both areas. Incorporating King's (2004) analysis of soil sensitivity for buried sites, the probability of identifying a buried archaeological site is less than 1% in Area A, and approximately 3% in Area B.

Recommendations

Area A is not considered sensitive for archaeological resources, and no further work is recommended. The Wilson Grove formation is known to contain fossil remains and if project plans will require excavation below the Goldridge soils present at the surface, a geologist qualified to address local paleontological resources should be consulted regarding appropriate treatment. Area B is considered moderately sensitive for prehistoric archaeological resources; an archaeologist should conduct an archaeological training session with crew prior to any ground disturbing work.

Please contact us if you have any questions or need additional information.

Sincerely,



Janine Origer
Senior Associate

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United States Army Corps of Engineers

- 1915 Sebastopol, California. 15' map. Engineer Reproduction Plant, U.S. Army Washington, D.C.

United States Geological Survey

- 1935 Sebastopol 1:48,000 quadrangle. Geological Survey, Washington, D.C.

- 1942 Sebastopol 15' quadrangle. Geological Survey, Washington, D.C.

- 1954a Camp Meeker 7.5' quadrangle. Geological Survey, Washington, D.C.

1954b Sebastopol 15' quadrangle. Geological Survey, Washington, D.C.

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Waghorn, A.

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Tom Origer & Associates

Archaeology / Historical Research

August 11, 2017

Jeff Church
Connie Munger-Barton
Sonoma County Water Agency
404 Aviation Blvd.
Santa Rosa, CA 95403

Re: Archival Search Results for the Airport-Larkfield-Wikiup Sanitation Zone Wastewater Treatment Facility at 800 Aviation Boulevard, Santa Rosa, for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project, Sonoma County, California.

Tom Origer & Associates completed archival research for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone Wastewater Transport Project. The study area is comprised of Airport-Larkfield-Wikiup Sanitation Zone Wastewater Treatment Facility at 800 Aviation Boulevard, Santa Rosa, Sonoma County, California. A Sacred Lands File Check was submitted to the Native American Heritage Commission on July 25, 2017. Research was completed at the Northwest Information Center (NWIC) of the California Historical Resources Information System on July 28, 2017 by Julia Franco, and encompassed lands within a half-mile of the study area. We also reviewed documents and maps pertinent to this project that are on file at our offices. This letter serves as a report of findings.

Archival Review

The Native American Heritage Commission replied via email on August 1, 2017, stating that a Sacred Lands File Check of the study area was completed with negative results.

Review at the NWIC (RS# 17-0195) found that the study area has been previously studied (Fredrickson 1986; Greenway 1986; Koenig 2011; Origer 1981; William Self Associates 2004). Over 40 other studies have been conducted within a half-mile of the study area. Of these, studies conducted within a quarter-mile of the study area are listed in Table 1.

Two archaeological sites, CA-SON-1323 and CA-SON-1324, have been recorded within the study area (Origer and Amaroli 1981a, 1981b). CA-SON-1324 is approximately _____ from the truck turnaround proposed as part of this project. There are seven additional resources recorded within a half-mile of the study area.

Ethnographic Review

At the time of European settlement, the study area within the territory of the Southern Pomo (Barrett 1908; McLendon and Oswalt 1978). The Pomo were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925).

Table 1. Studies conducted within 1/4 mile of study area

Author	Year	S#
Beard	1999	21456
Beard	2003	27320
Beard	2005	30492
Beck	2012	44102
Bieling	1987	9086
Kaptain	2012	45646
King	1978	1268
Newland	2014	45353
Origer	1986	8826
Origer	1987	8930
Origer	2011	38677
Psota	1994	16048
Pulcheon	2000	23000
Roop	1997	26602

They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied continually throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near sources of fresh water and in ecotones where plant life and animal life were diverse and abundant.

The nearest reported ethnographic village is *Tō'hmakau*, which is described as being on the north bank of Mark West Creek (Barrett 1908:222).

Historical Review

Historical maps show no buildings within the study areas (Bell and Heymans 1888; Bowers 1867; GLO 1868; McIntire and Lewis 1908; Reynolds and Proctor 1898; Thompson 1877). Topographic maps show no buildings within the study area (USACE 1920, USGS 1933, 1940, 1955a, 1955b).

Environmental Review

The geology of the study area is shown as Pleistocene alluvium, Holocene alluvium, and artificial fill (Delattre 2011). Soils within the study area consist of Huicha and Zamora series (Miller 1972:Sheet 65). Huicha soils are somewhat poorly-drained loams found on undulating low valley terraces. In an uncultivated state these soils support the growth of annual and perennial grasses, forbs, and scattered oaks. Historically, Huicha soils were used for growing grapes and prunes, and for dryland and irrigated pasture (Miller 1972:49). The Zamora soils consists of well-drained clay loams found on alluvial fans and flood plains. In an uncultivated state these soils support the growth of annual and perennial grasses, forbs, and scattered oaks. Historically, Zamora soils were used vineyards, orchards, and row and truck crops (Miller 1975:90).

Cultural Resources Sensitivity

Factors in determining the potential for surface prehistoric archaeological sites include: distance to water, slope of the study area, and archaeological data (Meyer *et al.* 2017). Determinations of the potential for buried archaeological sites also factor in landform age, as buried prehistoric archaeological sites are typically found in or beneath Holocene-age deposits. The terrain is nearly level and two seasonal creeks flow through the study area. The geology of the study area consists of Pleistocene and Holocene alluvium, with areas of artificial fill where ponds were installed. The alluvial deposits date from 2.58 million years ago to the present, which encompasses the human arrival and occupation of California.

Based on the factors above, the sensitivity for surface prehistoric archaeological sites is high. Map evidence suggests that the likelihood of encounter historical archaeological sites is low. Incorporating King's (2004) analysis of soil sensitivity for buried sites, the probability of identifying a buried archaeological site is 5-20%.

Recommendations

No additional archaeological survey work is recommended. However, the study area is considered very sensitive for buried prehistoric archaeological resources; an archaeologist should conduct an archaeological training session with crew prior to any ground disturbing work.

Please contact us if you have any questions or need additional information.

Sincerely,



Janine Origer
Senior Associate

Materials Consulted

Barrett, S.

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Bieling, D.

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1986 *Letter Report Regarding Archaeological monitoring of Sonoma County Airport Sewer Project construction activity at prehistoric site CA-SON-1324*. Document S-8772 on file at the Northwest Information Center, Rohnert Park.

General Land Office

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United States Army Corps of Engineers

1920 Healdsburg, California. 15' map. Engineer Reproduction Plant, U.S. Army Washington, D.C.

United States Geological Survey

1933 Healdsburg 1:48,000 quadrangle. Geological Survey, Washington, D.C.

1940 Healdsburg 15' quadrangle. Geological Survey, Washington, D.C.

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William Self Associates, Inc.

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APPENDIX C

Formal AB52 Tribal Cultural Resources Consultation Letters

NATIVE AMERICAN HERITAGE COMMISSION

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



May 17, 2017

Jeff Church
Sonoma County Water Agency

Sent via Email to: jchurch@scwa.ca.gov

Re: Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone, Healdsburg and Camp Meeker, Sonoma County

Dear Mr. Church:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced project.

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans. 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 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 requests that lead agencies include in their notifications information regarding any cultural resources assessment that has been completed on a potential "area of project affect" (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 measures.
- 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 public 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 will help to facilitate the consultation process.

Lead agencies or agencies potentially undertaking a project are encouraged to send more than one written notice to tribes that are traditionally and culturally affiliated to a potential APE during the 30-day notification period to ensure that the information has been received.

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: Sharaya.souza@nahc.ca.gov.

Sincerely,



Sharaya Souza
Staff Services Analyst

**Native American Heritage Commission
Tribal Consultation List
5/17/17**

Cloverdale Rancheria of Pomo Indians of California
Patricia Hermosillo, Chairperson
555 S. Cloverdale Blvd., Suite A Pomo
Cloverdale , CA 95425
(707) 894-5775

Lytton Rancheria of California
Marjorie Mejia, Chairperson
437 Aviation Blvd Pomo
Santa Rosa , CA 95403
margiemejia@aol.com
(707) 575-5917

Dry Creek Rancheria Band of Pomo Indians
Chris Wright, Chairperson
P.O. Box 607 Pomo
Geyserville , CA 95441
(707) 522-4233

Middletown Rancheria
Jose Simon III, Chairperson
P.O. Box 1035 Pomo
Middletown , CA 95461 Lake Miwok
(707) 987-3670 Office
(707) 987-9091 Fax

Federated Indians of Graton Rancheria
Gene Buvelot
6400 Redwood Drive, Ste 300 Coast Miwok
Rohnert Park , CA 94928 Southern Pomo
gbuvelot@gratonrancheria.
(415) 279-4844 Cell
(707) 566-2288 ext 103

Mishewal-Wappo Tribe of Alexander Valley
Scott Gabaldon, Chairperson
2275 Silk Road Wappo
Windsor , CA 95492
scottg@mishewalwappotribe.com
(707) 494-9159

Federated Indians of Graton Rancheria
Greg Sarris, Chairperson
6400 Redwood Drive, Ste 300 Coast Miwok
Rohnert Park , CA 94928 Southern Pomo
(707) 566-2288 Office
(707) 566-2291 Fax

Kashia Band of Pomo Indians of the Stewarts Point
Reno Keoni Franklin, Chairperson
1420 Guerneville Rd. Ste 1 Pomo
Santa Rosa , CA 95403
reno@stewartspoint.org
(707) 591-0580 Office

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 is applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2 for the proposed Occidental County Sanitation District to Airport-Larkfield-Wiklup Sanitation Zone, Healdsburg and Camp Meeker, Sonoma County.

May 22, 2017

Dry Creek Rancheria Band of Pomo Indians
Attn: Chris Wright, Chairperson
P.O. Box 607
Geyserville, California 95441

RE: Tribal Cultural Resources under California Environmental Quality Act, AB 52 (Gatto 2014) - Opportunity for Consultation

Dear Mr. Wright:

The Occidental County Sanitation District (District) will be preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. Please consider this letter and preliminary project information as formal notification of this Proposed Project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) § 21080.3.1(d) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52).

The Proposed Project would transport untreated wastewater from the District to the ALWSZ WWTF where it would be discharged into the collection system for treatment, storage, and disposal. The ALWSZ WWTF currently treats wastewater to tertiary-level standards and utilizes irrigation of agricultural lands for disposal of recycled water, with no discharges to surface waters. By transferring untreated wastewater to the ALWSZ for treatment, storage, and disposal, the Proposed Project would eliminate discharge of secondary-treated effluent into Dutch Bill Creek and Graham's Pond (a headwaters to Dutch Bill Creek), and would no longer rely on Graham's Pond for recycled water storage.

The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located

approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

The District seeks to provide an opportunity to initiate communications regarding historical or tribal cultural resources important to your community that could be affected by the Proposed Project. The District respectfully requests your participation in the identification and protection of such resources, understanding that you or other members of your community may possess specialized knowledge of the area.

We respectfully request that your organization respond in writing within 30 days, pursuant to PRC § 21080.3.1(b), if you wish to request consultation regarding possible significant effects that the Proposed Project may have on historical and/or tribal cultural resources. Please provide a designated lead contact person for your organization, if you have not already done so. If you have any questions or concerns regarding the Proposed Project please contact me at the following:

Jessica Martini-Lamb, Environmental Resources Manager
Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, California 95403
(707) 547-1903
Jessica.Martini.Lamb@scwa.ca.gov

Respectfully,

Jessica Martini-Lamb
Environmental Resources Manager

Att. Figure 1
Figure 2

cc. Tieraney Giron
Lynn Laub

May 22, 2017

Federated Indians of Graton Rancheria
Attn: Buffy McQuillen, Tribal Heritage Preservation Officer
6400 Redwood Drive, Suite 300
Rohnert Park, California 94928

RE: Tribal Cultural Resources under California Environmental Quality Act, AB 52 (Gatto 2014) - Opportunity for Consultation

Dear Ms. McQuillen:

The Occidental County Sanitation District (District) will be preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. Please consider this letter and preliminary project information as formal notification of this Proposed Project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) § 21080.3.1(d) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52).

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The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located

approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

The District seeks to provide an opportunity to initiate communications regarding historical or tribal cultural resources important to your community that could be affected by the Proposed Project. The District respectfully requests your participation in the identification and protection of such resources, understanding that you or other members of your community may possess specialized knowledge of the area.

We respectfully request that your organization respond in writing within 30 days, pursuant to PRC § 21080.3.1(b), if you wish to request consultation regarding possible significant effects that the Proposed Project may have on historical and/or tribal cultural resources. Please provide a designated lead contact person for your organization, if you have not already done so. If you have any questions or concerns regarding the Proposed Project please contact me at the following:

Jessica Martini-Lamb, Environmental Resources Manager
Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, California 95403
(707) 547-1903
Jessica.Martini.Lamb@scwa.ca.gov

Respectfully,

Jessica Martini-Lamb
Environmental Resources Manager

Att. Figure 1
Figure 2

cc. Greg Sarris, Tribal Chairman
Gene Buvelot

May 22, 2017

Lytton Rancheria of California
Attn: Marjorie Mejia, Chairperson
437 Aviation Boulevard
Santa Rosa, California 95403

RE: Tribal Cultural Resources under California Environmental Quality Act, AB 52 (Gatto 2014) - Opportunity for Consultation

Dear Ms. Mejia:

The Occidental County Sanitation District (District) will be preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. Please consider this letter and preliminary project information as formal notification of this Proposed Project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) § 21080.3.1(d) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52).

The Proposed Project would transport untreated wastewater from the District to the ALWSZ WWTF where it would be discharged into the collection system for treatment, storage, and disposal. The ALWSZ WWTF currently treats wastewater to tertiary-level standards and utilizes irrigation of agricultural lands for disposal of recycled water, with no discharges to surface waters. By transferring untreated wastewater to the ALWSZ for treatment, storage, and disposal, the Proposed Project would eliminate discharge of secondary-treated effluent into Dutch Bill Creek and Graham's Pond (a headwaters to Dutch Bill Creek), and would no longer rely on Graham's Pond for recycled water storage.

The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located

approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

The District seeks to provide an opportunity to initiate communications regarding historical or tribal cultural resources important to your community that could be affected by the Proposed Project. The District respectfully requests your participation in the identification and protection of such resources, understanding that you or other members of your community may possess specialized knowledge of the area.

We respectfully request that your organization respond in writing within 30 days, pursuant to PRC § 21080.3.1(b), if you wish to request consultation regarding possible significant effects that the Proposed Project may have on historical and/or tribal cultural resources. Please provide a designated lead contact person for your organization, if you have not already done so. If you have any questions or concerns regarding the Proposed Project please contact me at the following:

Jessica Martini-Lamb, Environmental Resources Manager
Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, California 95403
(707) 547-1903
Jessica.Martini.Lamb@scwa.ca.gov

Respectfully,

Jessica Martini-Lamb
Environmental Resources Manager

Att. Figure 1
 Figure 2

May 22, 2017

Middletown Rancheria
Attn: Stephanie L. Reyes, Tribal Historic Preservation Officer
P.O. Box 1035
Middletown, CA 95461

RE: Tribal Cultural Resources under California Environmental Quality Act, AB 52 (Gatto 2014) - Opportunity for Consultation

Dear Ms. Reyes:

The Occidental County Sanitation District (District) will be preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. Please consider this letter and preliminary project information as formal notification of this Proposed Project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) § 21080.3.1(d) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52).

The Proposed Project would transport untreated wastewater from the District to the ALWSZ WWTF where it would be discharged into the collection system for treatment, storage, and disposal. The ALWSZ WWTF currently treats wastewater to tertiary-level standards and utilizes irrigation of agricultural lands for disposal of recycled water, with no discharges to surface waters. By transferring untreated wastewater to the ALWSZ for treatment, storage, and disposal, the Proposed Project would eliminate discharge of secondary-treated effluent into Dutch Bill Creek and Graham's Pond (a headwaters to Dutch Bill Creek), and would no longer rely on Graham's Pond for recycled water storage.

The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located

approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

The District seeks to provide an opportunity to initiate communications regarding historical or tribal cultural resources important to your community that could be affected by the Proposed Project. The District respectfully requests your participation in the identification and protection of such resources, understanding that you or other members of your community may possess specialized knowledge of the area.

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Jessica Martini-Lamb, Environmental Resources Manager
Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, California 95403
(707) 547-1903
Jessica.Martini.Lamb@scwa.ca.gov

Respectfully,

Jessica Martini-Lamb
Environmental Resources Manager

Att. Figure 1
Figure 2

cc. Jose Simon III, Tribal Council Chairperson

May 22, 2017

Mishewal-Wappo Tribe of Alexander Valley
Attn: Scott Gabaldon, Chairperson
2275 Silk Road
Windsor, California 95492

RE: Tribal Cultural Resources under California Environmental Quality Act, AB 52 (Gatto 2014) - Opportunity for Consultation

Dear Mr. Gabaldon:

The Occidental County Sanitation District (District) will be preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. Please consider this letter and preliminary project information as formal notification of this Proposed Project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) § 21080.3.1(d) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52).

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The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located

approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

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We respectfully request that your organization respond in writing within 30 days, pursuant to PRC § 21080.3.1(b), if you wish to request consultation regarding possible significant effects that the Proposed Project may have on historical and/or tribal cultural resources. Please provide a designated lead contact person for your organization, if you have not already done so. If you have any questions or concerns regarding the Proposed Project please contact me at the following:

Jessica Martini-Lamb, Environmental Resources Manager
Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, California 95403
(707) 547-1903
Jessica.Martini.Lamb@scwa.ca.gov

Respectfully,

Jessica Martini-Lamb
Environmental Resources Manager

Att. Figure 1
 Figure 2

May 22, 2017

Yocha Dehe Wintun Nation
Attn: James Kinter, Tribal Historic Preservation Officer
P.O. Box 18
Brooks, CA 95606

RE: Tribal Cultural Resources under California Environmental Quality Act, AB 52 (Gatto 2014) - Opportunity for Consultation

Dear Mr. Kinter:

The Occidental County Sanitation District (District) will be preparing an Initial Study for the Occidental County Sanitation District to Airport-Larkfield-Wikiup Sanitation Zone (ALWSZ) Wastewater Transport Project (Proposed Project). The Sonoma County Water Agency (Water Agency), which operates the District's Wastewater Treatment Facility (WWTF) under contract, will prepare the Initial Study on behalf of the District in accordance with the provisions of the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the Water Agency's Procedures for the Implementation of CEQA. Please consider this letter and preliminary project information as formal notification of this Proposed Project as required under the California Environmental Quality Act (CEQA), specifically Public Resources Code (PRC) § 21080.3.1(d) and Chapter 532 Statutes of 2014 (i.e., Assembly Bill 52).

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The Proposed Project would be located within the District service area, and would utilize existing sanitation facilities in the ALWSZ, which is also operated by the Water Agency. The District provides service to the community of Occidental, which is located approximately 52 miles northwest of San Francisco, California (Figure 1). The District's existing facilities are comprised of the WWTF, located on property leased by the District from the Druid's Occidental Cemetery at 14445 Occidental Road (Figure 1), and the Lift Station, located on property owned by the District at 4200 Occidental-Camp Meeker Road (Figure 1). Wastewater transportation would primarily occur between the District Lift Station and the ALWSZ WWTF, located approximately 18 miles from the District on Aviation Boulevard near the Charles M. Schulz

Sonoma County Airport in Santa Rosa (Figure 2). Wastewater transportation would occur less frequently from the District WWTF located on Lu Dan Road off of Occidental Road in Occidental (Figure 2). Facility modifications would take place at the District WWTF, District Lift Station, and the ALWSZ WWTF. The county roads that would be utilized for this project are located in a mixture of unincorporated urban areas, rural residential areas, agricultural and forest lands, and commercial and industrial areas in and around the communities of Occidental, Graton, and Santa Rosa (Figure 2).

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We respectfully request that your organization respond in writing within 30 days, pursuant to PRC § 21080.3.1(b), if you wish to request consultation regarding possible significant effects that the Proposed Project may have on historical and/or tribal cultural resources. Please provide a designated lead contact person for your organization, if you have not already done so. If you have any questions or concerns regarding the Proposed Project please contact me at the following:

Jessica Martini-Lamb, Environmental Resources Manager
Sonoma County Water Agency
404 Aviation Blvd, Santa Rosa, California 95403
(707) 547-1903
Jessica.Martini.Lamb@scwa.ca.gov

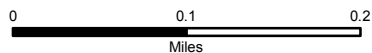
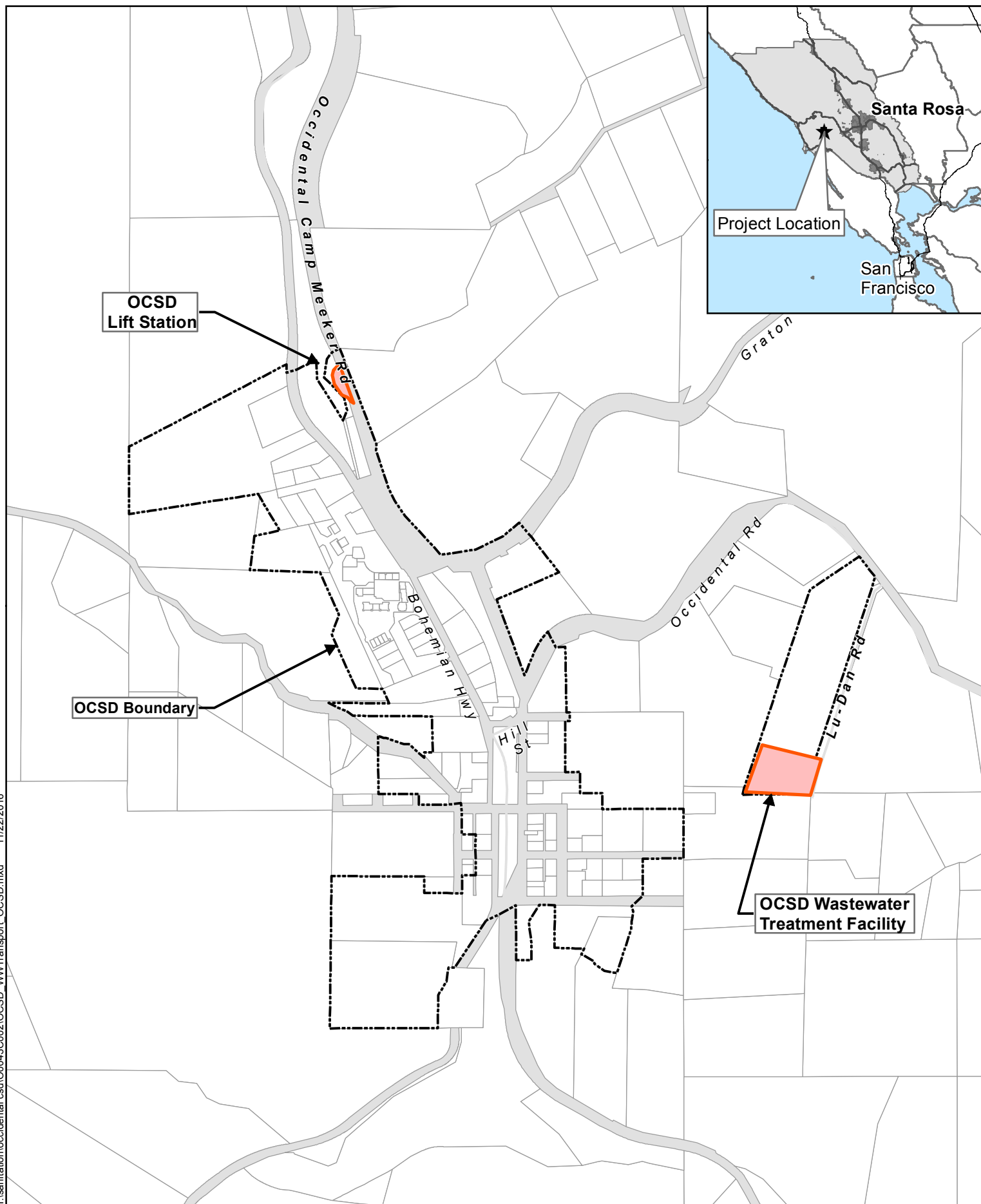
Respectfully,

Jessica Martini-Lamb
Environmental Resources Manager

Att. Figure 1
Figure 2

cc. Leland Kinter, Tribal Chairman

T:\sanitation\occidental csd\0043C002\OCSD_WWTransport_OCSD.mxd 11/22/2016

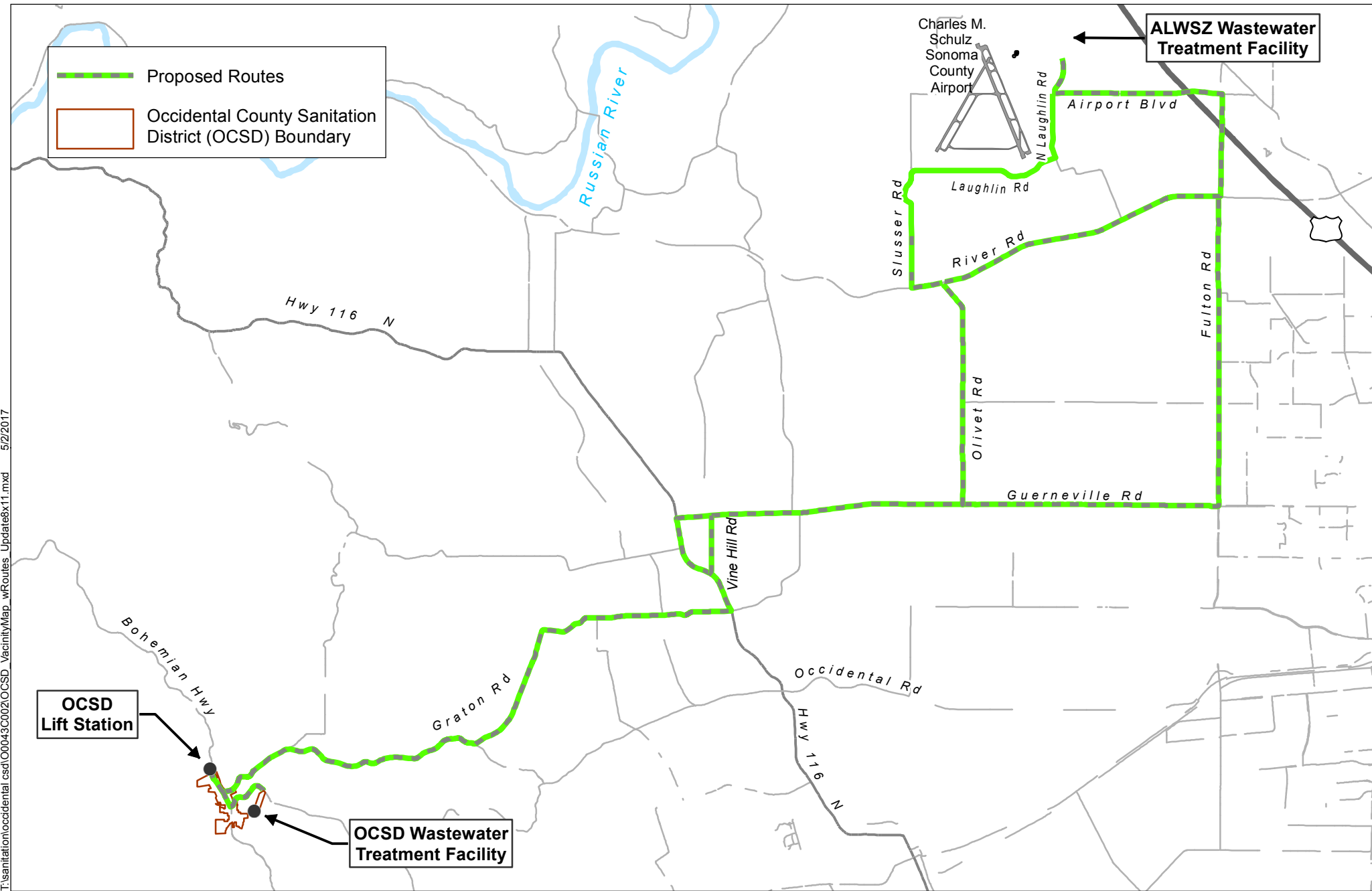


**Occidental County Sanitation District
Wastewater Transport Project
OCSD Location Map**

Figure 1



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OCSD to Airport Larkfield Wikiup Sanitation Zone (ALWSZ)
Wastewater Transport Project
Proposed Wastewater Transportation Routes

0 0.5 1 2 Miles

Figure 2



APPENDIX D

United States Fish and Wildlife Service and California Department of Fish and Wildlife Special-Status Species Lists



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

September 22, 2017

Consultation Code: 08ESMF00-2017-SLI-3349

Event Code: 08ESMF00-2017-E-09210

Project Name: OCSD to ALWSZ Wastewater Transport Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2017-SLI-3349

Event Code: 08ESMF00-2017-E-09210

Project Name: OCSD to ALWSZ Wastewater Transport Project

Project Type: WASTEWATER FACILITY

Project Description: OCSD WWTF study area

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.40792684608847N122.94318115190262W>



Counties: Sonoma, CA

Endangered Species Act Species

There is a total of 15 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Birds

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Steelhead <i>Oncorhynchus</i> (=Salmo) <i>mykiss</i> Population: Northern California DPS There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1007	Threatened

Insects

NAME	STATUS
Myrtle's Silverspot Butterfly <i>Speyeria zerene myrtleae</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6929	Endangered
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3394	Endangered

Crustaceans

NAME	STATUS
California Freshwater Shrimp <i>Syncaris pacifica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7903	Endangered

Flowering Plants

NAME	STATUS
<p>Baker's Larkspur <i>Delphinium bakeri</i></p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/5031</p>	Endangered
<p>Pennell's Bird's-beak <i>Cordylanthus tenuis ssp. capillaris</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3175</p>	Endangered
<p>Sebastopol Meadowfoam <i>Limnanthes vinculans</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/404</p>	Endangered
<p>Showy Indian Clover <i>Trifolium amoenum</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6459</p>	Endangered
<p>Sonoma Alopecurus <i>Alopecurus aequalis var. sonomensis</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/557</p>	Endangered
<p>Yellow Larkspur <i>Delphinium luteum</i></p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3578</p>	Endangered

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

September 22, 2017

Consultation Code: 08ESMF00-2017-SLI-3351

Event Code: 08ESMF00-2017-E-09216

Project Name: OCSD to ALWSZ Wastewater Transport Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

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New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

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We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2017-SLI-3351

Event Code: 08ESMF00-2017-E-09216

Project Name: OCSD to ALWSZ Wastewater Transport Project

Project Type: WASTEWATER FACILITY

Project Description: OCSD Lift Station study area

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.41284446836197N122.95056980691155W>



Counties: Sonoma, CA

Endangered Species Act Species

There is a total of 15 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Birds

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

Species profile: <https://ecos.fws.gov/ecp/species/2891>

Fishes

NAME

STATUS

Steelhead *Oncorhynchus* (=Salmo) *mykiss*

Threatened

Population: Northern California DPS

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

Species profile: <https://ecos.fws.gov/ecp/species/1007>

Insects

NAME

STATUS

Myrtle's Silverspot Butterfly *Speyeria zerene myrtleae*

Endangered

No critical habitat has been designated for this species.

Species profile: <https://ecos.fws.gov/ecp/species/6929>

San Bruno Elfin Butterfly *Callophrys mossii bayensis*

Endangered

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

Species profile: <https://ecos.fws.gov/ecp/species/3394>

Crustaceans

NAME

STATUS

California Freshwater Shrimp *Syncaris pacifica*

Endangered

No critical habitat has been designated for this species.

Species profile: <https://ecos.fws.gov/ecp/species/7903>

Flowering Plants

NAME	STATUS
<p>Baker's Larkspur <i>Delphinium bakeri</i></p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/5031</p>	Endangered
<p>Pennell's Bird's-beak <i>Cordylanthus tenuis ssp. capillaris</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3175</p>	Endangered
<p>Sebastopol Meadowfoam <i>Limnanthes vinculans</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/404</p>	Endangered
<p>Showy Indian Clover <i>Trifolium amoenum</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/6459</p>	Endangered
<p>Sonoma Alopecurus <i>Alopecurus aequalis var. sonomensis</i></p> <p>No critical habitat has been designated for this species.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/557</p>	Endangered
<p>Yellow Larkspur <i>Delphinium luteum</i></p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/3578</p>	Endangered

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

September 22, 2017

Consultation Code: 08ESMF00-2017-SLI-3350

Event Code: 08ESMF00-2017-E-09213

Project Name: OCSD Wastewater Transport Compliance Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2017-SLI-3350

Event Code: 08ESMF00-2017-E-09213

Project Name: OCSD to ALWSZ Wastewater Transport Project

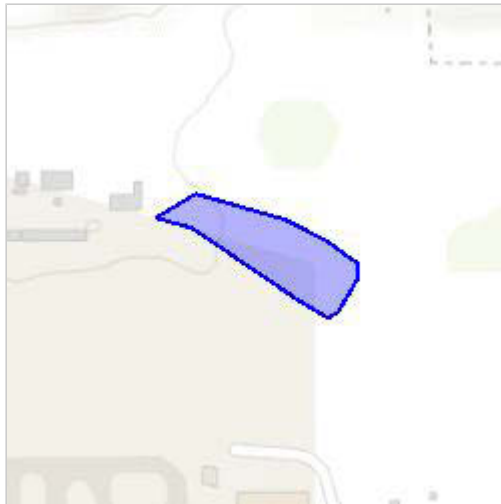
Project Type: WASTEWATER FACILITY

Project Description: ALWSZ wastewater treatment facility study area

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.51616438528565N122.80417430377943W>



Counties: Sonoma, CA

Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Birds

NAME	STATUS
Northern Spotted Owl <i>Strix occidentalis caurina</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (CA - Sonoma County) There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Endangered

Fishes

NAME	STATUS
Steelhead <i>Oncorhynchus</i> (=Salmo) <i>mykiss</i> Population: Northern California DPS There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1007	Threatened

Crustaceans

NAME	STATUS
California Freshwater Shrimp <i>Syncaris pacifica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7903	Endangered

Flowering Plants

NAME	STATUS
Burke's Goldfields <i>Lasthenia burkei</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Many-flowered Navarretia <i>Navarretia leucocephala</i> ssp. <i>plieantha</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2491	Endangered
Sebastopol Meadowfoam <i>Limnanthes vinculans</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/404	Endangered
Sonoma Sunshine <i>Blennosperma bakeri</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1260	Endangered

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Camp Meeker (3812248) OR Healdsburg (3812257))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American badger <i>Taxidea taxus</i>	AMAJF04010	None	None	G5	S3	SSC
Baker's larkspur <i>Delphinium bakeri</i>	PDRAN0B050	Endangered	Endangered	G1	S1	1B.1
Baker's manzanita <i>Arctostaphylos bakeri ssp. bakeri</i>	PDERI04221	None	Rare	G2T1	S1	1B.1
Baker's navarretia <i>Navarretia leucocephala ssp. bakeri</i>	PDPLM0C0E1	None	None	G4T2	S2	1B.1
bristly sedge <i>Carex comosa</i>	PMCYP032Y0	None	None	G5	S2	2B.1
Burke's goldfields <i>Lasthenia burkei</i>	PDAST5L010	Endangered	Endangered	G1	S1	1B.1
California freshwater shrimp <i>Syncaris pacifica</i>	ICMAL27010	Endangered	Endangered	G2	S2	
California giant salamander <i>Dicamptodon ensatus</i>	AAAAH01020	None	None	G3	S2S3	SSC
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
coho salmon - central California coast ESU <i>Oncorhynchus kisutch</i>	AFCHA02034	Endangered	Endangered	G4	S2?	
congested-headed hayfield tarplant <i>Hemizonia congesta ssp. congesta</i>	PDAST4R065	None	None	G5T1T2	S1S2	1B.2
Crystal Springs lessingia <i>Lessingia arachnoidea</i>	PDAST5S0C0	None	None	G2	S2	1B.2
dwarf downingia <i>Downingia pusilla</i>	PDCAM060C0	None	None	GU	S2	2B.2
foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050	None	Candidate Threatened	G3	S3	SSC
fragrant fritillary <i>Fritillaria liliacea</i>	PMLIL0V0C0	None	None	G2	S2	1B.2
golden larkspur <i>Delphinium luteum</i>	PDRAN0B0Z0	Endangered	Rare	G1	S1	1B.1
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
Greene's narrow-leaved daisy <i>Erigeron greenei</i>	PDAST3M5G0	None	None	G3	S3	1B.2
hoary bat <i>Lasiurus cinereus</i>	AMACC05030	None	None	G5	S4	
holly-leaved ceanothus <i>Ceanothus purpureus</i>	PDRHA04160	None	None	G2	S2	1B.2



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
many-flowered navarretia <i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	PDPLM0C0E5	Endangered	Endangered	G4T1	S1	1B.2
marsh microseris <i>Microseris paludosa</i>	PDAST6E0D0	None	None	G2	S2	1B.2
Methuselah's beard lichen <i>Usnea longissima</i>	NLLEC5P420	None	None	G4	S4	4.2
Napa false indigo <i>Amorpha californica</i> var. <i>napensis</i>	PDFAB08012	None	None	G4T2	S2	1B.2
narrow-anthered brodiaea <i>Brodiaea leptandra</i>	PMLIL0C022	None	None	G3?	S3?	1B.2
Navarro roach <i>Lavinia symmetricus navarroensis</i>	AFCJB19023	None	None	G4T1T2	S2S3	SSC
North Coast semaphore grass <i>Pleuropogon hooverianus</i>	PMPOA4Y070	None	Threatened	G2	S2	1B.1
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
obscure bumble bee <i>Bombus caliginosus</i>	IIHYM24380	None	None	G4?	S1S2	
osprey <i>Pandion haliaetus</i>	ABNKC01010	None	None	G5	S4	WL
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G5	S3	SSC
pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	PDAST4R0P2	None	None	G3T2	S2	1B.2
Pennell's bird's-beak <i>Cordylanthus tenuis</i> ssp. <i>capillaris</i>	PDSCR0J0S2	Endangered	Rare	G4G5T1	S1	1B.2
red-bellied newt <i>Taricha rivularis</i>	AAAAF02020	None	None	G4	S2	SSC
Rincon Ridge ceanothus <i>Ceanothus confusus</i>	PDRHA04220	None	None	G1	S1	1B.1
Rincon Ridge manzanita <i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i>	PDERI041G4	None	None	G3T1	S1	1B.1
Russian River tule perch <i>Hysterocarpus traski</i> <i>pomo</i>	AFCQK02011	None	None	G5T4	S4	SSC
saline clover <i>Trifolium hydrophilum</i>	PDFAB400R5	None	None	G2	S2	1B.2
Sebastopol meadowfoam <i>Limnanthes vincularis</i>	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
Sonoma alopecurus <i>Alopecurus aequalis</i> var. <i>sonomensis</i>	PMPOA07012	Endangered	None	G5T1	S1	1B.1
Sonoma sunshine <i>Blennosperma bakeri</i>	PDAST1A010	Endangered	Endangered	G1	S1	1B.1



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sonoma tree vole <i>Arborimus pomo</i>	AMAFF23030	None	None	G3	S3	SSC
steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus</i>	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
thin-lobed horkelia <i>Horkelia tenuiloba</i>	PDROS0W0E0	None	None	G2	S2	1B.2
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G3G4	S2	SSC
two-fork clover <i>Trifolium amoenum</i>	PDFAB40040	Endangered	None	G1	S1	1B.1
Vine Hill ceanothus <i>Ceanothus foliosus var. vineatus</i>	PDRHA040D6	None	None	G3T1	S1	1B.1
western bumble bee <i>Bombus occidentalis</i>	IIHYM24250	None	None	G2G3	S1	
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western red bat <i>Lasiurus blossevillei</i>	AMACC05060	None	None	G5	S3	SSC
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP

Record Count: 51

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

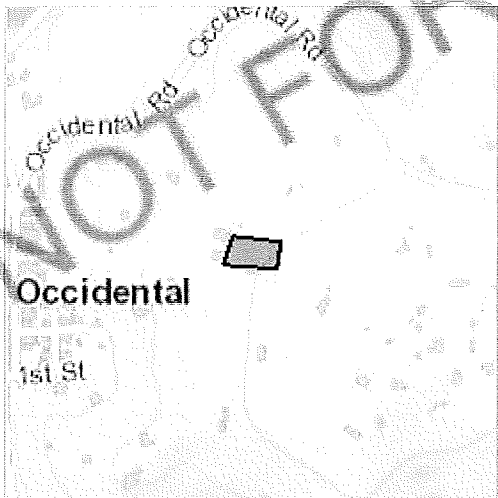
Project information

NAME

OCSD to ALWSZ Wastewater Transport Project

LOCATION

Sonoma County, California

**DESCRIPTION**

OCSD

WWTF study area

Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species

¹ are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened

Northern Spotted Owl *Strix occidentalis caurina*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1123>

Yellow-billed Cuckoo *Coccyzus americanus*

Threatened

There is **proposed** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3911>

Reptiles

NAME

STATUS

Green Sea Turtle *Chelonia mydas*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6199>

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

Fishes

NAME

STATUS

Steelhead *Oncorhynchus (=Salmo) mykiss*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1007>

Insects

NAME

STATUS

Myrtle's Silverspot Butterfly *Speyeria zerene myrtleae*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6929>

San Bruno Elfin Butterfly *Callophrys mossii bayensis*

Endangered

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/3394>

Crustaceans

NAME

STATUS

California Freshwater Shrimp *Syncaris pacifica*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7903>

Flowering Plants

NAME

STATUS

Baker's Larkspur *Delphinium bakeri*

Endangered

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/5031>

Pennell's Bird's-beak *Cordylanthus tenuis ssp. capillaris*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3175>

Sebastopol Meadowfoam *Limnanthes vincularis*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/404>

Showy Indian Clover *Trifolium amoenum*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6459>

Sonoma Alopecurus *Alopecurus aequalis* var. *sonomensis*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/557>

Yellow Larkspur *Delphinium luteum*

Endangered

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3578>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
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3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
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The birds listed below are USFWS Birds of Conservation Concern that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the E-bird data mapping tool (year-round bird sightings by birders and the general public) and Breeding Bird Survey (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the E-bird Explore Data Tool.

NAME	BREEDING SEASON
Allen's Hummingbird <i>Selasphorus sasin</i> https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Black Oystercatcher <i>Haematopus bachmani</i> https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Turnstone <i>Arenaria melanocephala</i>	Breeds elsewhere
California Thrasher <i>Toxostoma redivivum</i>	Breeds Jan 1 to Jul 31
Great Blue Heron <i>Ardea herodias</i> https://ecos.fws.gov/ecp/species/2170	Breeds Mar 15 to Aug 15
Lesser Yellowlegs <i>Tringa flavipes</i> https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Long-billed Curlew <i>Numenius americanus</i> https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit <i>Limosa fedoa</i> https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Olive-sided Flycatcher <i>Contopus cooperi</i> https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Red Knot <i>Calidris canutus</i> ssp. <i>roselaari</i> https://ecos.fws.gov/ecp/species/8880	Breeds elsewhere
Red-throated Loon <i>Gavia stellata</i>	Breeds elsewhere

Rock Sandpiper *Calidris ptilocnemis ptilocnemis*

Breeds elsewhere

Rufous Hummingbird *selasphorus rufus*

Breeds Apr 15 to Jul 15

<https://ecos.fws.gov/ecp/species/8002>

Semipalmated Sandpiper *Calidris pusilla*

Breeds elsewhere

Short-billed Dowitcher *Limnodromus griseus*

Breeds elsewhere

<https://ecos.fws.gov/ecp/species/9480>

Whimbrel *Numenius phaeopus*

Breeds elsewhere

<https://ecos.fws.gov/ecp/species/9483>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (●)

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

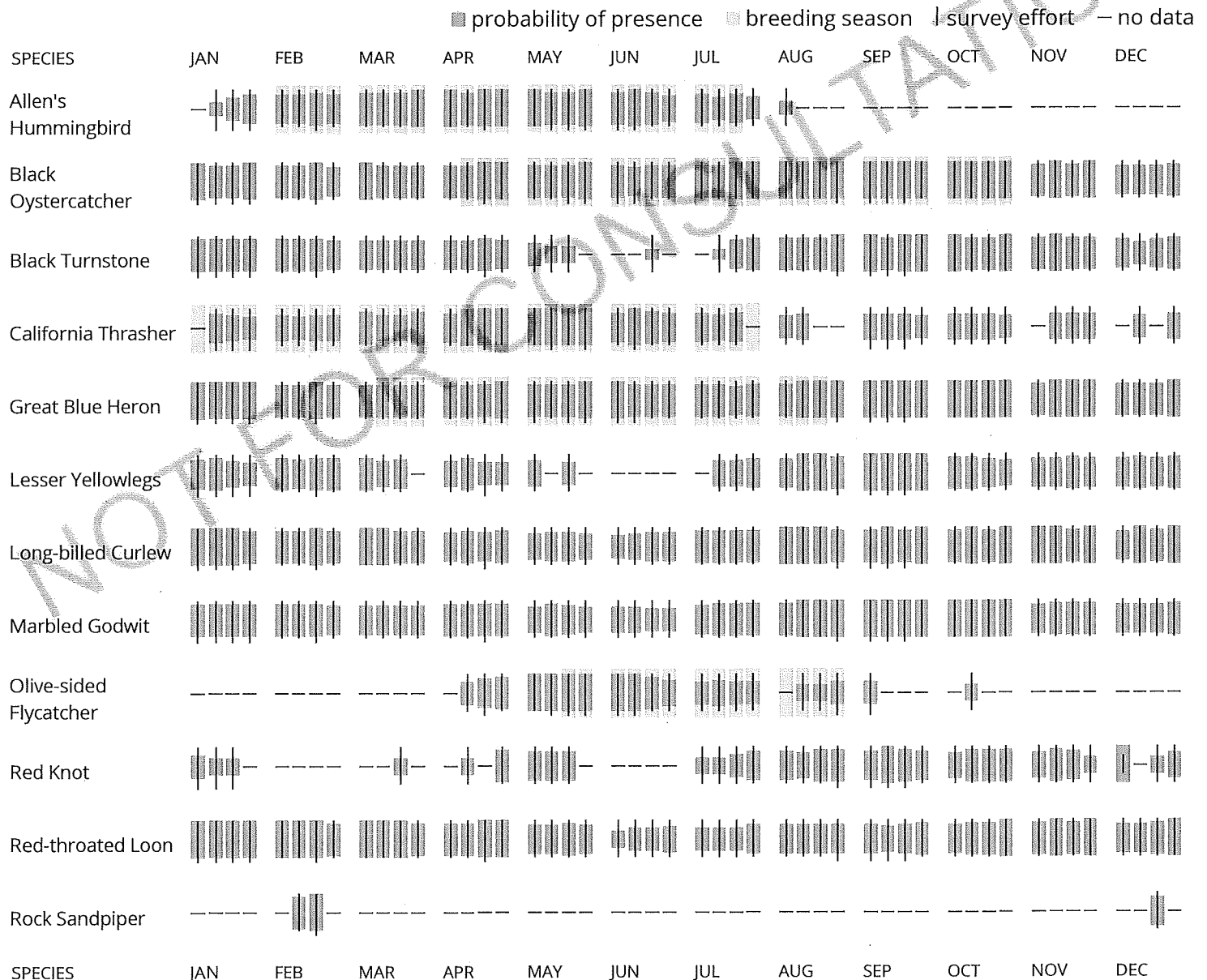
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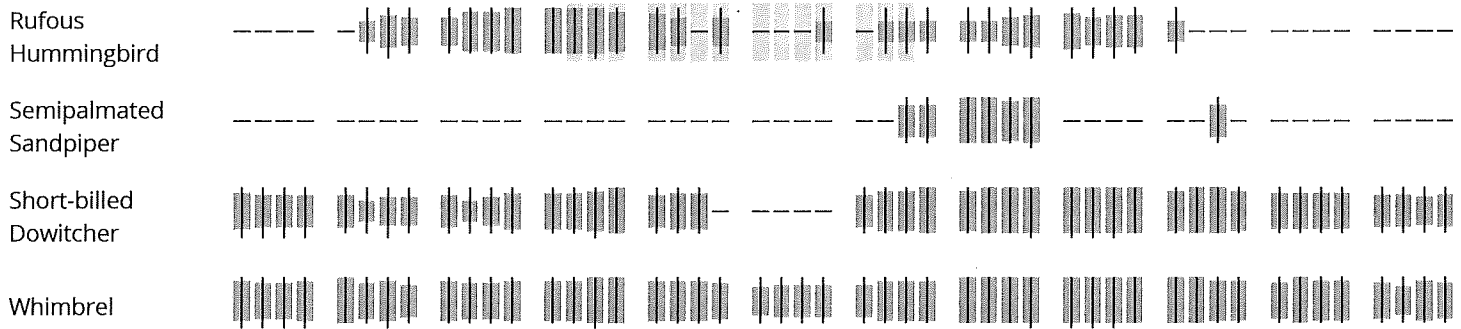
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A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in Birds of North America (BNA) Online under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a subscription. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

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The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets. The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a

bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

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THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

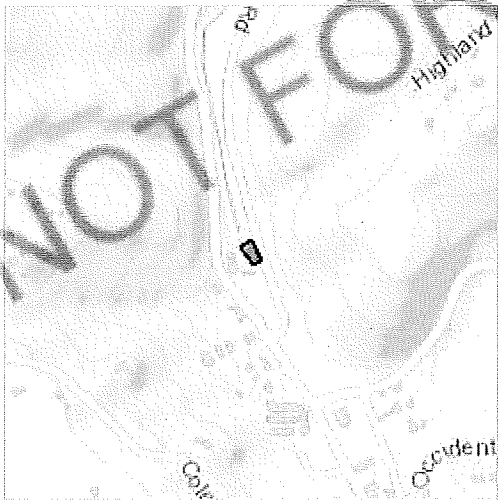
Project information

NAME

OCSD to ALWSZ Wastewater Transport Project

LOCATION

Sonoma County, California

**DESCRIPTION**

OCSD

Lift Station study area

Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species

¹ are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Marbled Murrelet <i>Brachyramphus marmoratus</i>	Threatened
There is final designated critical habitat for this species. Your location is outside the critical habitat.	
https://ecos.fws.gov/ecp/species/4467	

Northern Spotted Owl *Strix occidentalis caurina*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1123>

Yellow-billed Cuckoo *Coccyzus americanus*

Threatened

There is **proposed** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3911>

Reptiles

NAME

STATUS

Green Sea Turtle *Chelonia mydas*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6199>

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

Fishes

NAME

STATUS

Steelhead *Oncorhynchus (=Salmo) mykiss*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1007>

Insects

NAME

STATUS

Myrtle's Silverspot Butterfly *Speyeria zerene myrtleae*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6929>

San Bruno Elfin Butterfly *Callophrys mossii bayensis*

Endangered

There is **proposed** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/3394>

Crustaceans

NAME

STATUS

California Freshwater Shrimp *Syncaris pacifica*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7903>

Flowering Plants

NAME

STATUS

Baker's Larkspur *Delphinium bakeri*

Endangered

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/5031>

Pennell's Bird's-beak *Cordylanthus tenuis* ssp. *capillaris*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3175>

Sebastopol Meadowfoam *Limnanthes vincularis*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/404>

Showy Indian Clover *Trifolium amoenum*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6459>

Sonoma Alopecurus *Alopecurus aequalis* var. *sonomensis*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/557>

Yellow Larkspur *Delphinium luteum*

Endangered

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/3578>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

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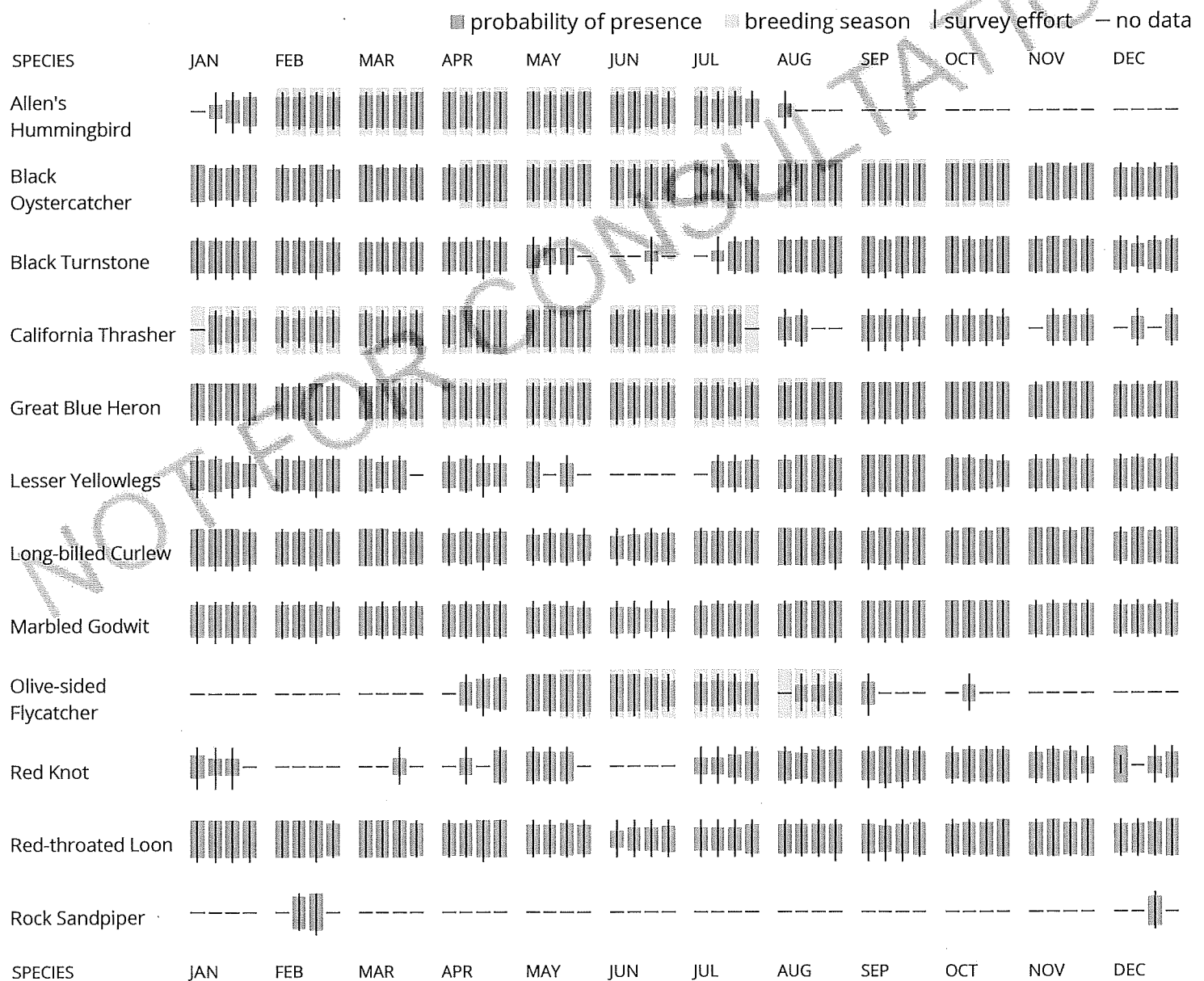
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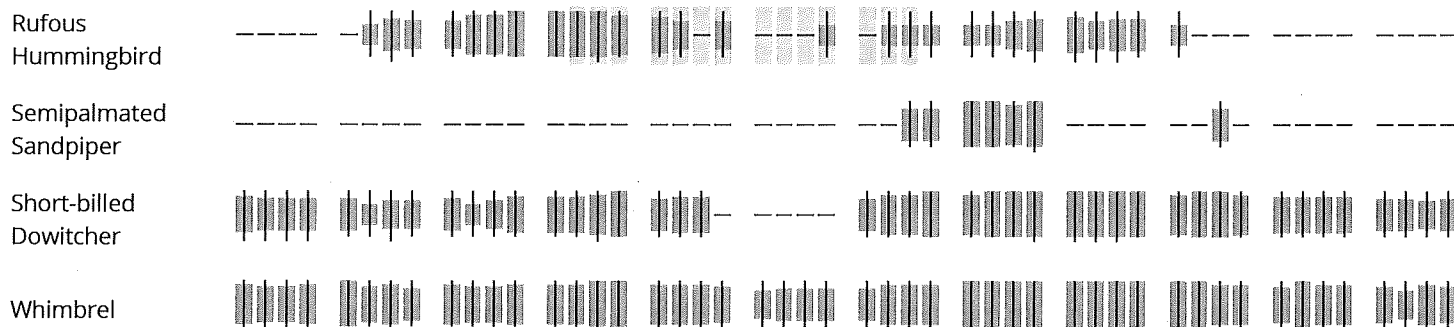
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Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

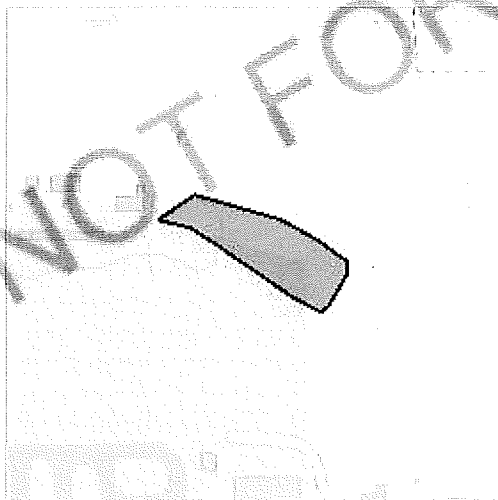
Project information

NAME

OCSD to ALWSZ Wastewater Transport Project

LOCATION

Sonoma County, California

**DESCRIPTION**

ALWSZ

wastewater treatment facility study area

Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species

¹ are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Birds

NAME

STATUS

Northern Spotted Owl *Strix occidentalis caurina*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1123>

Reptiles

NAME

STATUS

Green Sea Turtle *Chelonia mydas*

Threatened

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6199>

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.<https://ecos.fws.gov/ecp/species/2891>California Tiger Salamander *Ambystoma californiense*

Endangered

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.<https://ecos.fws.gov/ecp/species/2076>

Fishes

NAME

STATUS

Steelhead *Oncorhynchus* (=Salmo) *mykiss*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.<https://ecos.fws.gov/ecp/species/1007>

Crustaceans

NAME

STATUS

California Freshwater Shrimp *Syncaris pacifica*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7903>

Flowering Plants

NAME

STATUS

Burke's Goldfields *Lasthenia burkei*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4338>

Many-flowered Navarretia *Navarretia leucocephala* ssp. *plieantha*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2491>

Sebastopol Meadowfoam *Limnanthes vincularis*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/404>

Sonoma Sunshine *Blennosperma bakeri*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1260>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds
<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are USFWS Birds of Conservation Concern that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the E-bird data mapping tool (year-round bird sightings by birders and the general public) and Breeding Bird Survey (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the E-bird Explore Data Tool.

NAME	BREEDING SEASON
Allen's Hummingbird <i>Selasphorus sasin</i> https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Ashy Storm-petrel <i>Oceanodroma homochroa</i> https://ecos.fws.gov/ecp/species/7237	Breeds May 1 to Jan 15
Black Oystercatcher <i>Haematopus bachmani</i> https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31
Black Rail <i>Laterallus jamaicensis</i> https://ecos.fws.gov/ecp/species/7717	Breeds Mar 1 to Sep 15
Black Swift <i>Cypseloides niger</i> https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black Turnstone <i>Arenaria melanocephala</i>	Breeds elsewhere

Burrowing Owl <i>Athene cunicularia</i> https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
California Spotted Owl <i>Strix occidentalis occidentalis</i> https://ecos.fws.gov/ecp/species/7266	Breeds Mar 10 to Jun 15
California Thrasher <i>Toxostoma redivivum</i>	Breeds Jan 1 to Jul 31
Common Yellowthroat <i>Geothlypis trichas sinuosa</i> https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch <i>Carduelis lawrencei</i> https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Lewis's Woodpecker <i>Melanerpes lewis</i> https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-billed Curlew <i>Numenius americanus</i> https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Marbled Godwit <i>Limosa fedoa</i> https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker <i>Picoides nuttallii</i> https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse <i>Baeolophus inornatus</i> https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Red Knot <i>Calidris canutus</i> ssp. <i>roselaari</i> https://ecos.fws.gov/ecp/species/8880	Breeds elsewhere
Rufous Hummingbird <i>elasphorus rufus</i> https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Snowy Plover <i>Charadrius alexandrinus</i>	Breeds Mar 5 to Sep 15

Song Sparrow *Melospiza melodia pusillula*

<https://ecos.fws.gov/ecp/species/3509>

Breeds Feb 20 to Sep 5

Spotted Towhee *Pipilo maculatus clementae*

<https://ecos.fws.gov/ecp/species/4243>

Breeds Apr 15 to Jul 20

Tricolored Blackbird *Agelaius tricolor*

<https://ecos.fws.gov/ecp/species/3910>

Breeds Mar 15 to Aug 10

Whimbrel *Numenius phaeopus*

<https://ecos.fws.gov/ecp/species/9483>

Breeds elsewhere

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies.

If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

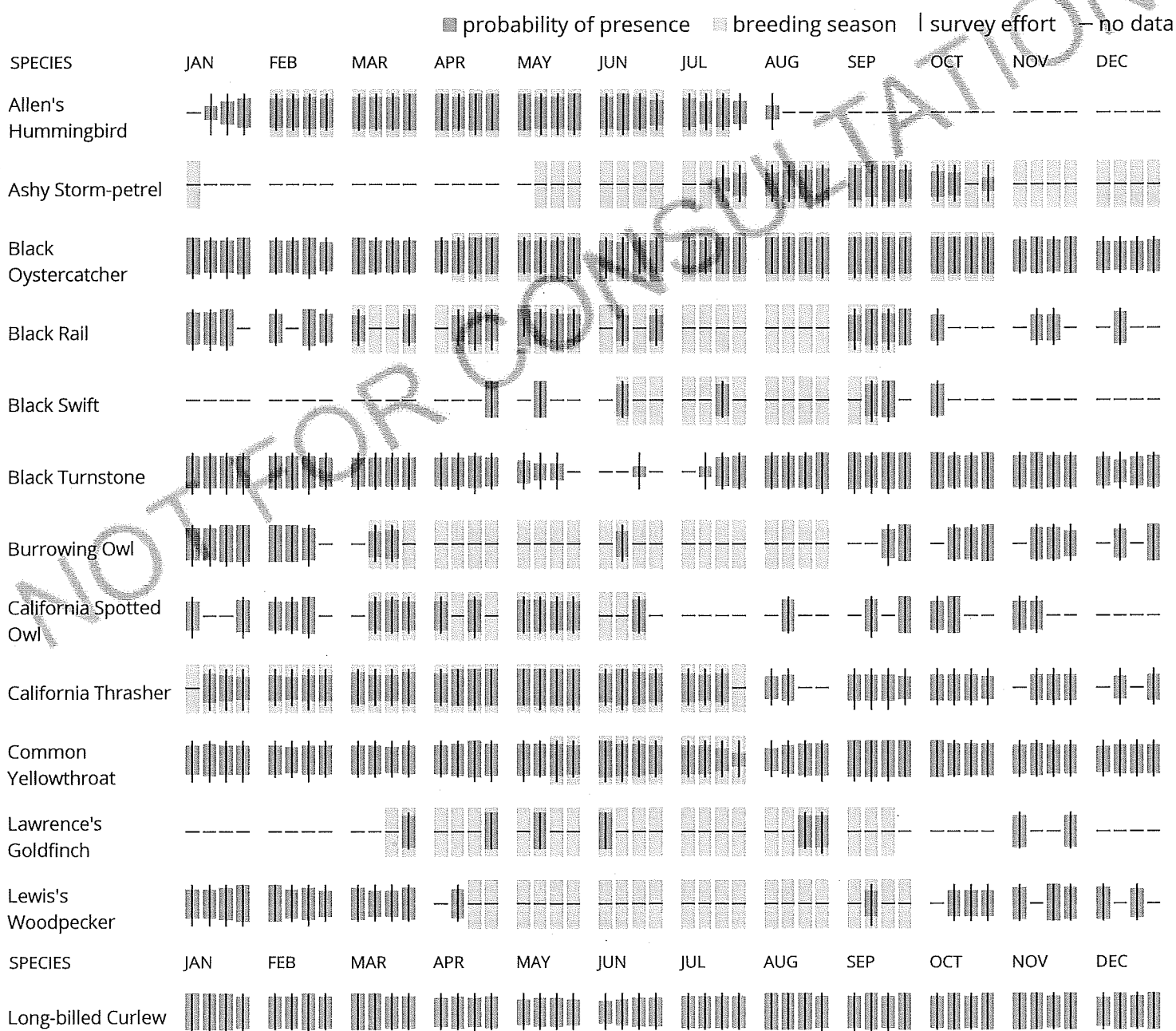
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

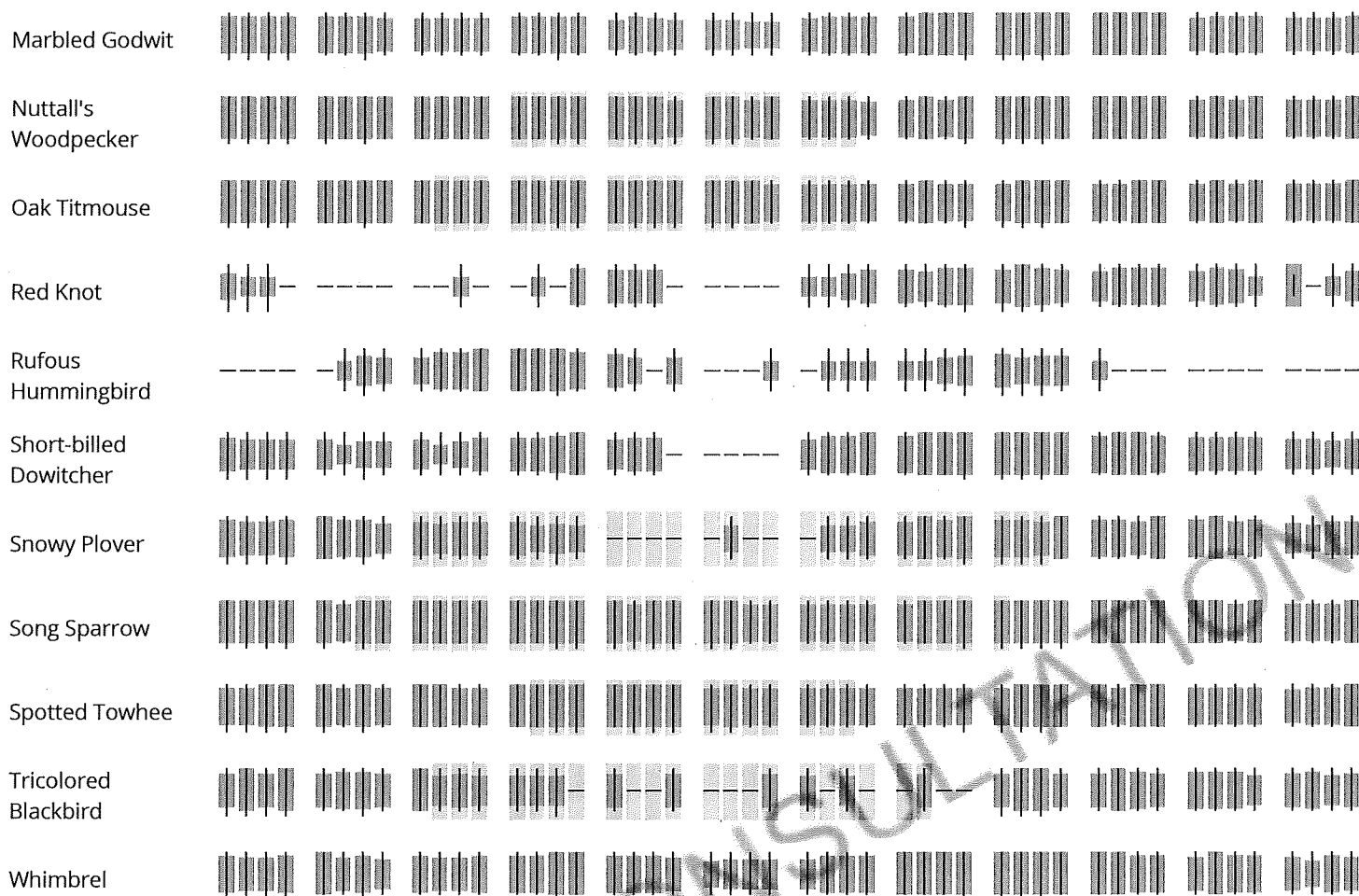
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in Birds of North America (BNA) Online under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a subscription. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the Endangered Species Act (ESA).

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets. The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

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