

February 15, 2019

Sustainable Water Facility, Feasibility Study and Assessment of Environmentally Sensitive Habitat Areas (ESHA)

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1.0 Introduction

The CCSD completed the Sustainable Water Facility during 2014 in response to an epic, long-term drought. The project was completed under an emergency coastal development permit (CDP) issued by San Luis Obispo County. The CCSD has applied for a regular coastal development permit from the county, and the application is currently being processed. To support the project's regular CDP permitting effort, the CCSD completed an environmental impact report (EIR), which was certified by the CCSD Board on July 27, 2017¹. The entire project site consists of mapped and unmapped Environmentally Sensitive Habitat Area (ESHA) of varying quality². The certified project EIR included a land use analysis and Local Coastal Program consistency analysis in developing its adopted mitigation measures, however, questions have since been raised by Coastal Commission staff over unmapped ESHA and whether the CCSD considered alternatives that would have a lesser impact on mapped, as well as unmapped ESHA. Therefore, this study was initiated to help address this concern.

A key step towards completing this study was meeting with California Coastal Commission (CCC) and County staff (Mr. Airlin Singewald) at the SWF site on September 24, 2018. This meeting included the CCC's Mr. Tom Luster and Ms. Laurie Koteen, the CCC biologist. The CCSD was represented by District Engineer Bob Gresens, their commissioned biologist Ms. Cindy Cleveland, as well as CCSD Directors David Pierson and Jim Bahringer. Following this meeting, Ms. Cleveland analyzed reference data and field conditions to further consider the issue of unmapped ESHA. In addition, District staff have sought out guidance from County planning staff to further gauge the scope of this effort. The results of this information gathering and analysis effort are summarized within this report. This study further documents that the established facility location was the least impacting to mapped and unmapped ESHA when compared to other alternative locations, both on or off-site.

2.0 Background

The CCSD is remotely located and does not have access to a regional water supply, such as a regional aqueduct or supply reservoir. Therefore, it has relied upon very efficient water conservation, along with groundwater from local coastal stream aquifers to meet municipal, commercial/visitor serving, and institutional water demands. During 2002, the CCSD was successful in obtaining a Federal Water Resources Development Act grant to help develop a reliable water supply project. This grant, administered by the US Army Corps of Engineers, completed geological

¹ July 27, 2017 CCSD Resolution 34-2017 certifying the Revised Final Subsequent Environmental Impact Report (SEIR)

² January 15, 2019 Memorandum from Laurie Koteen to Tom Luster

investigative work, preliminary environmental analyses, and a supply alternatives study. The supply alternatives study effort included a series of facilitated public workshops, which were followed by the completion of a November 27, 2013 engineering technical memorandum entitled “Cambria Water Supply Alternatives.” The 2013 report analyzed 28 water supply alternatives and concluded that a brackish water supply alternative was the most technically feasible supply alternative. (Please see part 4 for a brief summary of the final eight alternatives of the 2013 report.)

Following completion of the 2013 supply alternatives report, drought conditions intensified as storms diverted around the central California coast due to a large, stationary high-pressure area. The extremely dry conditions lead to the California Department of Health (now the Division of Drinking Water) issuing a December 26, 2013 notice to public water purveyors urging them to develop supply contingency plans for implementing supply alternatives, such as the use of brackish, non-potable water. This pointed CCSD staff towards developing a more limited and less impacting version of the 2013 report’s brackish water supply alternative, which became known as an emergency water supply project. The County issued an emergency coastal development permit to the CCSD on May 15, 2014, which conditions included a requirement to complete the project within six months. (The emergency water supply project is frequently referred to as the Sustainable Water Facility, or SWF. For purposes of this report, the 2014 constructed facility will be referred to as the SWF.)

To make the project as streamlined and efficient as possible, the SWF was designed to: 1) avoid or otherwise minimize potential environmental impacts; 2) stay within the confines of existing CCSD-owned property that was being used for water and wastewater operations off of San Simeon Creek Road (the former Bonomi Dairy Ranch, which the CCSD purchased in the late 1970s); and, 3) reuse or repurpose as much of the existing CCSD infrastructure as possible. The site used for the completed project was deemed to be ideal for indirect potable reuse of brackish water, which included non-potable treated wastewater effluent, because the area was already being used for wastewater disposal, with the upgradient portion of the property already being used as a potable water supply well field. The completed SWF essentially draws water from a well between the CCSD treated wastewater effluent disposal percolation ponds, with the extracted water consisting of a blend of treated wastewater effluent, deeper brackish from an inland saltwater wedge, and creek underflow. To meet state Title 22 requirements, the extracted brackish water is highly treated by an advanced water treatment plant before being reinjected into the groundwater aquifer near the CCSD potable wells. The placement of the injection well and intermediate monitoring well were carefully chosen based on a sophisticated geohydrological model. The modeling effort located an injection point that allowed for at least a 60-day underground travel time before reaching the existing CCSD potable wells. The existing CCSD potable wells (Wells SS-1 and SS-2) then pump a portion of the injected water into the potable water distribution system. When the system is operating, the maximum extraction rates of the CCSD potable wells (a combination from existing wells SS1 or SS2) is permitted at no more than 400 gallons per minute. (Well SS-3 is left off whenever the SWF operates due to it being located within the 60-day travel time, Title 22 permit constraint.)

To further avoid or minimize impacts, the SWF included a design element that can provide approximately 100 gpm of micro-filtered and reverse osmosis (RO) treated water to the head of the San Simeon Creek lagoon to maintain water levels in the lagoon. If RO treated water is used for this purpose, it is dechlorinated and oxygenated before being mixed with the filtered water (the micro-filtered water is not chlorinated). Project construction impacts were avoided by reusing and repurposing an existing wastewater effluent storage pond to an evaporation pond for the third stage

reverse osmosis (RO) reject water (the RO flow rate is 39 gpm while the facility operates). This approximate 3.5-acre surface area storage basin was originally constructed during the early 1980s. The SWF interconnecting pipelines minimized or otherwise avoided impacts by being laid on the ground surface as opposed to being installed into excavated trenches.

The completed project also repurposed an existing groundwater gradient control well, which has an assigned state well ID number of 27S 8E 9P7 (subsequently referred to in this report as well 9P7). The gradient control well 9P7 discharge was converted from agricultural irrigation as part of the CCSD's 1993-1994 effluent percolation basins construction. Its purpose for the 1993-1994 project was to lower the groundwater table under the percolation basins in order to maintain a positive groundwater table gradient from the up-gradient well field to the percolation basins. Prior to the SWF project, well 9P7 had a vertical turbine irrigation pump, which would pump at a rate of approximately 600 to 700 gpm. It would discharge into a lower reach of Van Gordon Creek when groundwater table drawdown was needed, which would normally coincide with the late dry season. During completion of the SWF project, the well 9P7 pump was changed to a smaller, lower-capacity submersible style pump, which is currently permitted by the State Water Board to pump at no greater than 400 gpm. The repurposed well discharge was routed to the SWF project's advanced water treatment plant, which following treatment, would reinject 400 gpm into the groundwater basin near the upgradient potable wells. Whenever the SWF operates during periods when there is no flow in the lower San Simeon Creek, existing Water Board permitting calls for there to be a side-stream lagoon discharge from the advanced water treatment plant into the upstream mouth of the San Simeon Creek lagoon. This is done to maintain surface water level within the lagoon, which is further detailed within Appendix E6 of the SWF project's 2016 public review draft SEIR, which is entitled, "Technical Memorandum – San Simeon Creek Flows."

3.0 Existing Project Layout

Figure 1 shows the SWF project layout, as it was described within the 2016 SEIR. There are three main categories shown: facilities that existed prior to the project; the constructed SWF facilities; and, proposed future modifications. Because it was not included on the illustration legend, it should be noted that within this figure, the purple shaded brine evaporation pond footprint was also the same footprint area of the pre-existing treated wastewater effluent holding basin (aka the repurposed Van Gordon Creek Reservoir), which was originally constructed in 1983.

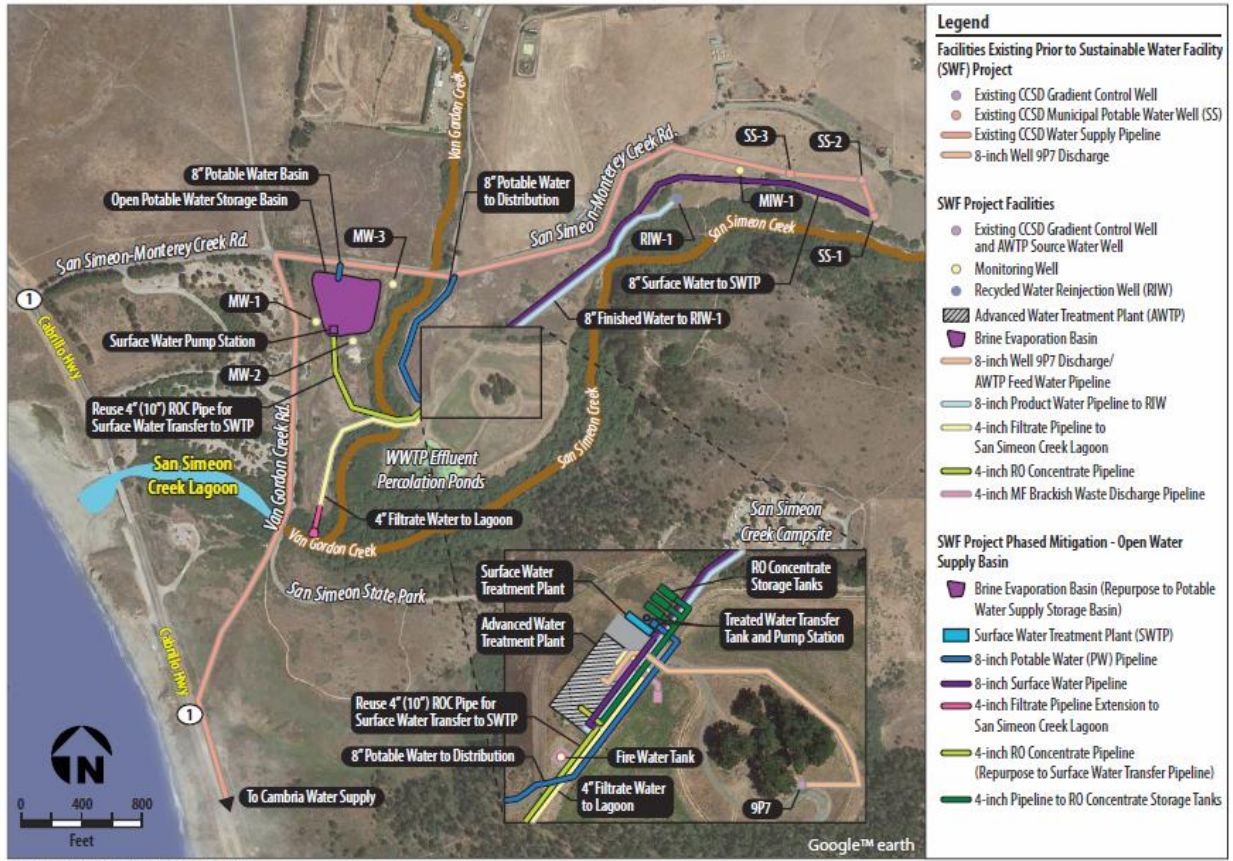


Figure 1 – SWF Layout

The following discussion describes the primary SWF elements, which include: the advanced water treatment plant, the evaporation basin (repurposed treated wastewater effluent basin/surface water impoundment basin), recharge injection well, monitoring wells, and interconnecting pipelines.

3.1 Advanced Water Treatment Plant

The Advanced Water Treatment Plant (AWTP) treats extracted groundwater from 9P7 to meet state Title 22 requirements for the indirect potable reuse of treated wastewater effluent. The treatment provides multiple barriers to remove contaminants and disinfection prior to being re-injected into the groundwater basin near the upgradient CCSD potable well field. The AWTP treatment process includes membrane filtration, three stages of reverse osmosis, and an advanced oxidation process that utilizes ultraviolet light and hydrogen peroxide. The equipment to build the AWTP treatment was pre-packaged and mounted in six shipping containers. Accessory equipment (UV vessels, water tanks, pump skids and double-contained chemical storage tanks) was installed outside of the shipping containers on concrete housekeeping pads. The total footprint of the AWTP covers an area of approximately 22,000 square feet (about 175 feet by 125 feet).

3.2 Evaporation Basin/repurposed treated wastewater effluent storage basin (aka surface water storage basin/Van Gordon Creek Reservoir).

The SWF's evaporation basin was originally constructed in 1983 to store treated wastewater effluent after it was pumped approximately 2.5 miles from the CCSD's wastewater treatment plant. The reservoir was originally referenced as the "Van Gordon Creek Reservoir" on its original design drawings, and has had several descriptions given to it over the years. Its original 1983 construction involved the cut and fill of approximately 17,000 cubic yards of earthen material. From approximately 1983 to 1993, treated wastewater effluent held in the reservoir was subsequently disposed of by an overhead spray system located on CCSD land (spray fields) located just south of the Reservoir and north of San Simeon Creek. The Reservoir had a surface area of between 105,000 square feet to 137,000 square feet, depending on the water level. In 1994 the use of the spray fields was discontinued, and treated wastewater effluent disposal was shifted from surface spraying to the use of percolation ponds located southeast of the Reservoir. From approximately 1994 to 2007 the reservoir continued to be used prior to treated effluent discharge into the percolation ponds. During 2007 the Reservoir was no longer used to hold wastewater effluent due to installation of new piping and valves, which allowed treated wastewater effluent to go directly into the percolation ponds.

To minimize construction and ground disturbing impacts, the 2014 constructed SWF project repurposed the Van Gordon Creek Reservoir to an evaporation basin to evaporate the facility's third stage reverse osmosis reject water. This effort involved adding a multiple layer liner and monitoring wells to meet California Title 27 requirements. To accelerate natural evaporation, five mechanical evaporators were installed on the western edge of the basin (the CCSD now intends to remove the evaporators). The resultant evaporation basin covers the same footprint and location as the original 1983 reservoir. The evaporation basin area was previously disturbed and is located further away from San Simeon Creek where California red-legged frogs occur.

3.3 Recharge Injection Well/

The SWF recharge injection well RIW-1 location was based on a detailed geohydrological modeling effort to ensure the injected AWTP treated water would travel for at least 60 days underground before reaching the existing CCSD potable wells (existing well field wells SS1 and SS2). The footprint of the injection well is approximately 15 square feet. It is located approximately 725 feet west of existing CCSD potable well SS3.

3.4 Monitoring Wells

Five monitoring wells were installed as part of the SWF project. Monitoring well MIW-1 is located approximately midway between injection well RIW-1 and existing CCSD potable well SS-2. Well MIW-1 is used to verify performance criteria are being met when the SWF is operating. Its footprint area is approximately four square feet.

Three monitoring wells were installed around the perimeter of the evaporation basin to meet Title 27 criteria. These are wells MW-1, MW-2, and MW-3. Each of these well locations has a footprint area of approximately four square feet.

Monitoring well MW-4 was added as a change order during the completion of the SWF to eventually replace pre-existing monitoring well 16D1. This was done in response to Water Board staff expressing concerns on whether the SWF project's nearby lagoon water discharge would bias the

sampling results from well 16D1 samples due to the lagoon water discharge being very high-quality water. Well MW-4 was installed approximately 150 feet up gradient from well 16D1 and is on the northern edge of the San Simeon Creek riparian corridor. Its footprint area is approximately 12 square feet.

3.5 Interconnecting Pipelines

The pipelines for the SWF were placed by determining the shortest distance between two points that avoided riparian habitats and cultural resources. By carefully selecting the pipeline materials being used, most of the 4,630 linear feet interconnecting pipeline (4,150 linear feet) was installed above ground by simply laying the pipe on top of the existing ground surface. This approach minimized the area of impact from the pipelines and also avoided potential impacts when compared to more traditional pipeline installation methods, such as trenching and burial. Only 480 linear feet of interconnecting pipeline was installed below grade, which was done to avoid impacts to Van Gordon Creek or where above ground pipelines would create a tripping hazard or otherwise blocked facility operator access. Where two pipeline reaches crossed Van Gordon Creek, trenchless boring was used to avoid disturbing the riparian corridor. This overall pipeline approach was feasible due to the project property being within the CCSD owned boundaries, which is fenced to prevent foot and vehicle traffic.

3.6 Proposed Modifications

The certified SEIR for the SWF project included Mitigation Measures (Proposed Modifications), which are to be built in the future. The proposed modifications include;

- A surface water treatment facility, which would be constructed adjacent to the project’s existing advanced wastewater treatment plant.
- Storage tanks for purposes of transferring water and off hauling of reverse osmosis reject water.
- A pump station at the southern edge of the impoundment basin, which would be part of converting the evaporation basin to storing water for future potable use.
- Interconnecting pipelines. These pipelines would be laid along top of ground surface, per original project’s pipeline installation technique, to avoid or minimize potential impacts.
- The lagoon water discharge will be extended to a point further south to the creek bank; the pipeline would be placed by hand to protect riparian habitat. Articulating concrete block lining (Armorflex) would be installed at the bank to prevent erosion, but allow for continued growth of riparian vegetation.

Estimated ground surface area disturbance from the SWF is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Advanced Water Treatment Plant	175 feet by 125 feet	22,000 square feet
Interconnecting Pipelines	4,125 feet by 2 feet	8,250 square feet
Lagoon water discharge	200 feet by 5feet	1,000 square feet
Proposed Future Modifications		
Surface Water Plant & Tanks	40 feet by 80 feet	3,200 square feet
Interconnecting Pipeline	5,200 feet by 2 feet	10,400 square feet
Lagoon Water Discharge Ext.	300 feet by 5 feet	1,500 square feet
Estimated Total Disturbed Area		46,350 sf, or 1.06 acres

The above estimate does not include the evaporation basin’s 152,460 square foot area (3.5 acre) because it was pre-existing since 1983.

4.0 Considered Unfeasible Alternatives to the SWF

The following considered unfeasible alternatives to the SWF are summarized from the Sustainable Water Facility Project SEIR Section 7 Alternatives. Based on the SEIR summary, which was based upon the earlier 2013 Water Supply Alternatives Technical memorandum, each of these alternatives would have disturbed more surface area than the SWF project. To allow for such a comparison, the approximate area of disturbance from each alternative is briefly summarized.

4.1 Shamel Park Seawater Alternative

The proposed Shame Park Seawater Alternative was a seawater reverse osmosis desalination facility which would have been built on property next to the Cambria wastewater treatment plant. The seawater intake was proposed for Shamel Park and the concentrate return for Santa Rosa Beach. The CCSD was unable to access the required areas to do geotechnical studies, which ultimately led to this project becoming stalled. Due to the complicated permitting and associated sensitivity of the work being within a state park, as well as below an off-shore state marine park, and a federal marine sanctuary, this alternative was determined to not be feasible.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Desalination Treatment Facility	150 feet by 200 feet	30,000 square feet
Seawater Intake at Shamel Park	115 feet by 130 feet	14,950 square feet
Parking lot staging area for drilling	80 feet by 150 feet	12,000 square feet
Seawater Transmission Piping & Waste Stream Piping	20 feet by 1600 feet	32,000 square feet
Product water pipeline	15 feet by 1000 feet	15,000 square feet
Total Estimated Disturbed Area		105,000 sf, or 2.4 acres

This estimate of disturbed ground area does not include the approximate 1,200 feet of horizontal directionally drilled intake piping and 1,600 feet of concentrate return piping, which would extend under the community park, beach, and offshore areas.

4.2 San Simeon Creek Off-stream Storage Alternative

The proposed San Simeon Creek Off-Stream Storage Alternative would divert water from San Simeon Creek, during the wet weather season, into storage reservoirs before treatment. This alternative was not feasible as it would have required the permitting of three reservoirs with dam heights of 100, 90, and 80 feet within the Coastal Zone, and on lands that had to be acquired. The areas of three proposed reservoirs were 22.6, 10.2, and 6.1 acres. It was also unknown if there would be enough precipitation to fill the reservoirs after construction.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Off-stream Reservoirs	22.6, 10.2, & 6.1 acres	38.9 acres
Conveyance pipelines	16,120 feet X 10 feet	161,200 square feet, or 3.7 acres
Water Treatment Plant	1.25 acres	1.25 acres
Total Estimated Disturbed Area		43.9 acres

4.3 Morro Bay Shared Seawater Reverse Osmosis Alternative

The proposed Morro Bay Shared Seawater Reverse Osmosis Alternative would use beach wells to supply seawater to an existing Morro Bay desalination plant for treatment. In order to get the product water to Cambria an approximately 18-mile pipeline would have to be built. This alternative would also have required updates to the desalination plant. This alternative was not feasible due to the costs, permitting issues, and timeline to upgrade the desalination plant and to build the pipeline.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Transmission main to CCSD	18.5 miles X 10 feet	22.42 acres
Beach well pipeline	4,900 feet X 10 feet	4,900 square feet, or 0.11 acres
Beach wells	3 wells X 25 sf each	75 square feet
Desalination Treatment Facility	150 feet by 200 feet	30,000 square feet, or 0.69 acres
Total Estimated Disturbed Area		23.22 acres

4.4 Estero Bay Marine Terminal Alternative

The proposed Estero Bay Marine Terminal Alternative would use off-shore seawater intake at Dog Beach (between Morro Bay and Cayucos) to a proposed seawater reverse osmosis plant along Toro Creek Road. The concentrate return would go to the Morro Bay Power Plant and an approximately 16-mile pipeline would bring the product water to Cambria. This alternative was not feasible due to the high construction costs, permitting complications, and timeline to build the pipeline and treatment plant.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Transmission main to CCSD	16.5 miles X 10 feet	20 acres
Concentrate return pipeline	20,900 feet X 10 feet	4.8 acres
Seawater RO Treatment Plant		75 square feet
Desalination Treatment Facility	150 feet by 200 feet	30,000 square feet, or 0.69 acres
Total Estimated Disturbed Area		25.42 acres

4.5 Hard Rock Water Storage and Recovery Alternative

The proposed Hard Rock Water Storage and Recovery Alternative would use water pumped from Santa Rosa Creek. A new reverse osmosis treatment plant would be built and after treatment the water would be stored in a confined hard rock aquifer. This alternative was not feasible because it

required land acquisition on privately-owned property, had high costs for the storage and recovery wells, and had incomplete data on groundwater quality and yields.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Water conveyance main	20,000 ft X 10 feet	20 acres
Concentrate return pipeline	5,000 ft X 10 feet	4.8 acres
Brackish Water Treatment Plant	175 feet by 125 feet	22,000 square feet, or 0.46 acres
Aquifer storage & recovery wells	42 wells at 25 sf each	1,050 square feet, or 0.02acres
Total Estimated Disturbed Area		25.28 acres

4.6 Whale Rock Reservoir Alternative

The proposed Whale Rock Reservoir Alternative would pump water from San Simeon Creek and Santa Rosa Creek to Whale Rock Reservoir. This alternative would require a new water treatment plant in Cayucos and 16.5 miles of pipeline. This alternative was not feasible because of the high cost and the time it would take to complete. In addition, it required complex negotiations with the City of San Luis Obispo and San Luis Obispo County.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Transmission main to CCSD	16.5 miles X 10 feet	20 acres
Cambria Pump station with reservoirs		0.5 acres
Cambria SWTP (at Whale Rock)		1.25 acres
Total Estimated Disturbed Area		21.75 acres

4.7 San Simeon Community Services District Recycled Water Alternative

The proposed San Simeon Community Service District Recycled Water Alternative would divert and pump wastewater from the San Simeon CSD wastewater treatment plant to the CCSD wastewater treatment plant. The wastewater would be treated and used for irrigation which would offset potable water demand. This alternative was unfeasible because the volume of recycled water supply and demand were very small when compared to dry weather demands. Besides there would not be enough demand for the reclaimed water to offset the water demand of the Cambria community, this alternative's cost and timing to complete were deemed unfeasible.

The estimated ground surface area disturbance from this alternative is summarized below.

Project Feature	Key Dimensions	Estimated Disturbance Area
Wastewater Conveyance Pipeline to CCSD	4.17 miles X 10 feet	5.05 acres
Wastewater Pump station	30 ft by 50 ft	1,500 sf. or 0.03 acres
Total Estimated Disturbed Area		5.08 acres

5.0 Project Constraints Associated with ESHA

In general, the CCSD property off of San Simeon Creek road has higher quality ESHA at the riparian San Simeon Creek corridor and to a lesser degree, the Van Gordon Creek corridor. The habitat quality diminishes as the distance increases away from the creek channels. Except for the project's lagoon water discharge, the main project components are located northerly from the main San Simeon Creek channel, as further described below.

5.1 Advanced Water Treatment Plant (AWTP)

The AWTP is located south of San Simeon Monterey Creek Road and east of Van Gordon Creek (Figure 1). The AWTP was built in a previously disturbed area located south of an existing fence at the base of a slope; and, north of an existing gravel road, which was previously used for CCSD access to well 9P7 and the percolation ponds. The AWTP was placed in this location because the habitat was previously disturbed, and its site location was a maximum distance from San Simeon Creek and Van Gordon Creek, which contain special-status species (See Attachment photograph 1). The site was further constrained from being located any further north due the terrain and archeological resources.

5.2 Evaporation Basin/repurposed treated wastewater effluent storage basin (aka surface water storage basin/Van Gordon Creek Reservoir)

In 2014 the existing Van Gordon Creek Reservoir was repurposed (a liner was added) to hold third stage reverse osmosis reject water which is generated by the AWTP process. The resultant brine evaporation pond covers the same footprint as the original 1983-constructed Reservoir.

The brine evaporation pond was built in the same area as the Reservoir because the area was already disturbed, covered by upland species such as coyote bush (*Baccharis pilularis*), and was located away from San Simeon Creek and Van Gordon Creek where special-status species occur (See Attachment photographs 2-6).

5.3 Monitoring Wells and Recharge Injection Well

Geohydrological modeling determined the location of the monitoring wells and recharge injection well. According to the geohydrological modeling these wells had to be placed in specific locations for operation of the project.

5.4 Interconnecting Pipelines

The pipelines for the SWF were placed by determining the shortest distance between two points that avoided riparian habitats and cultural resources. Most of the 4,630 linear feet pipeline (4,150 linear

feet) was installed above ground to avoid impacts and 480 linear feet was installed below grade to avoid impacts to Van Gordon Creek or where above ground pipelines would create a tripping hazard or block facility access.

6.0 Potential Mitigation Measure, Section 7 Consultation, AMP

6.1 Proposed Conservation Easement

During the September 24, 2018 field meeting with County, Coastal Commission, and CCSD representatives, the concept of providing a conservation easement on CCSD owned property was broached as a potential mitigation for incidental project impacts to unmapped and mapped ESHA. This was proposed adjacent to the lower reach of San Simeon Creek, which would be higher quality habitat for listed species, such as the California Red Legged Frog. This conservation easement would be conditioned to allow for well monitoring operations by CCSD staff, as well as installation of the revised lagoon water discharge structure. The lagoon water discharge is described within the certified SEIR as a future project modification. The following shows the approximate location of the proposed conservation easement.



Approximate location of proposed conservation easement area.

6.2 Section 7 Consultation

The CCSD is currently pursuing an Endangered Species Act (ESA) Section 7 consultation with federal agencies. This work is continuing in parallel with the CCSD's regular CDP application process.

6.3 Adaptive Management Plan

The Section 7 ESA consultation process further augments the CCSD's adaptive management plan (AMP), which is currently being relied upon to avoid any incidental take of a listed species. Completing the ESA consultation process, ensures there will be more resource agency communications and input than was originally feasible while completing the original project work within the timeline allowed for in the emergency CDP.

7.0 Summary

In 2014 the CCSD had to address a Stage 3 Water Shortage Emergency Condition and based on professional advice and environmental concerns the SWF was built at the CCSD San Simeon well field and treated wastewater effluent land disposal system property. The CCSD chose the SWF alternative because it was to be built in areas already impacted by current and past CCSD activities, it was located away from San Simeon Creek and Van Gordon Creek, and there was no other feasible alternative on or off-site. The SWF project disturbed 1.06 acres which is by far the lowest acreage of disturbance of any of the considered alternatives, even including alternatives that were previously found to be infeasible.

8.0 Attachments



Photo 1. Google Earth photograph taken in 2013 of future AWTP location, existing fencing location, and existing access road location.



Photo 2. Google Earth photograph taken in 2013 of Reservoir before it was repurposed in 2014. Reservoir is located to the right of the arrow.



Photo 3. Reservoir in 2014 before repurposing.



Photo 4. Reservoir in 2014 before repurposing.



Photo 5. Reservoir in 2014 before repurposing.



Photo 6. Reservoir in 2014 before repurposing.