



# 8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

A significant effect on the environment is generally defined as a substantial or potentially substantial adverse change in the physical environment (CEQA Guidelines Section 15328). The term "environment," as used in this definition, means the physical conditions that exist within the area that will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise and objects of historic or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the proposed project. The "environment" includes both natural and man-made conditions (CEQA Guidelines Section 15360).

Detailed analyses and discussion of environmental topics found to be significant are provided within <u>Section 5.0</u> of this SEIR. <u>Section 5.0</u> also identifies impacts that are found to be less than significant. The following resources do not exist within the Project area and/or the Project is not considered to have the potential to cause a significant environmental impact. As such, detailed analyses of the environmental resources presented below were not included in this SEIR.

## 8.1 AGRICULTURAL AND FOREST RESOURCES

8.1.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?

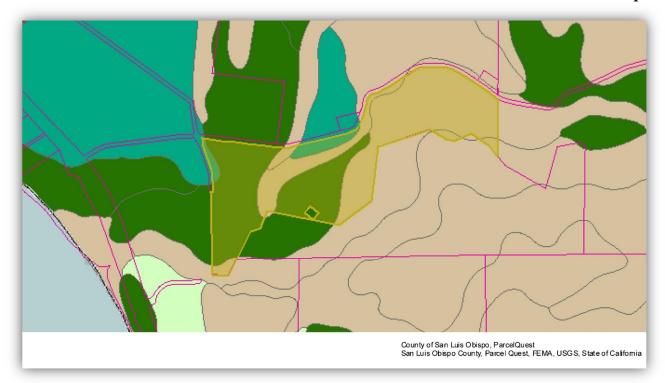
<u>No Impact</u>. The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP), which produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. A classification system that combines technical soil ratings and current land use is the basis for the Important Farmland Maps of these lands. For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land constitute 'agricultural land' (Public Resources Code Section 21060.1).

As shown on the Permit View NRCS [Natural Resources Conservation Service] Farmland Classification Map below, portions of the Project site are designated "Prime Farmland if Irrigated" and "Farmland of Statewide Importance."





## Permit View NRCS [Natural Resources Conservation Service] Farmland Classification Map



The FMMP establishes criteria for each land category, including for "Prime Farmland" and Farmland of Statewide Importance," as follows:

**Prime Farmland (P)** - Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Download information on the soils qualifying for Prime Farmland. More general information on the definition of Prime Farmland is also available.

**Farmland of Statewide Importance (S)** - Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Download information on the soils qualifying for Farmland of Statewide Importance.

The Project site is not currently used for agricultural production. The site has been in public utility use since 1979 when the CCSD constructed its San Simeon well field and treated wastewater effluent disposal system.<sup>1</sup>

\_

<sup>&</sup>lt;sup>1</sup> Written Communication: Robert C. Gresens, P.E., District Engineer, Cambria Community Services District, June 5, 2014 and August 15, 2016.

The site's existing water facilities are shown on Exhibit 3-3, Existing Site Conditions, and described in Section 3.1.2, Environmental Setting (On-Site Land Uses). The land has not been used for irrigated agricultural production during at least the last 36 years. The land does not meet the criteria for Prime Farmland or Farmland of Statewide Importance. Therefore, the Project does not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) and no impact would occur in this regard.

## 8.1.b Conflict with existing zoning for agricultural use, or a Williamson Act contract?

<u>Less Than Significant Impact</u>. The Project site is designated Agriculture (AG). However, the Project does not conflict with the site's existing AG designation, since Public Utility Facilities<sup>2</sup> are allowable uses in AG-designated sites, according to Coastal Table O. Additionally, the Project involves construction of water facilities entirely within an existing public facility site. Further, the AG-designated areas outside of the Project site would not be disturbed. The Project site is not under a Williamson Act contract. Therefore, the Project does not conflict with existing zoning for agricultural use or a Williamson Act contract.

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

**No Impact.** The Project site is designated Agriculture (AG). Therefore, the Project does not conflict with existing zoning for, or cause rezoning of, forest land or timberland.

## 8.1.d Result in the loss of forest land or conversion of forest land to non-forest use?

**No Impact.** The Project site does not contain forest land. The site has been in public utility use since 1979 when the CCSD constructed its San Simeon well field and treated wastewater effluent disposal system. There is one small stand of Monterey pine (*Pinus radiata*) located within the Project site. The stand is located in the center of the percolation ponds, with Well 9P7 located underneath the trees. Based on the small size of this stand, it is not considered an actual "forest" community, but rather an isolated stand. Further, no improvements are proposed within or adjacent to the Monterey Pine stand. The Well 9P7 discharge pipeline is an existing pipeline. Therefore, the Project does not result in the loss of forest land or conversion of forest land to nonforest use. No impact would occur in this regard.

<sup>&</sup>lt;sup>2</sup> Public Utility Facilities [J5] include public water system wells, treatment plants, and storage, and community wastewater treatment plants, settling ponds, and disposal fields, among other (see Coastal Zone Framework for Planning Excerpts Land Use Definitions).



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

**No Impact.** As discussed in Response 8.1.a above, the land (Project site) has not been used for irrigated agricultural production during at least the last 36 years. The land does not meet the criteria for Prime Farmland or Farmland of Statewide Importance. Agricultural uses are located north and east of the Project site. The Project involves construction of water facilities entirely within the CCSD property, which has been in public utility use since 1979 when the CCSD constructed its San Simeon well field and treated wastewater effluent disposal system. Therefore, the Project does not involve changes in the existing environment which, could result in conversion of Farmland, to non-agricultural.

As discussed in Response 8.1.d, the Project site does not contain forest land. Scattered Monterey pines are present offsite, on the hillsides south of the Project site. However, the Project involves construction of water facilities entirely within the Project site limits. Therefore, the Project does not involve changes in the existing environment, which could result in conversion of forest land to non-forest use.

## **8.2 BIOLOGICAL RESOURCES**

**8.2.a.** Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No Impact.** The Project does 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, as there are none pertaining to the Project site. The Project site is located outside of the nearby Hearst Ranch Conservation Plan.

## 8.3 GEOLOGY AND SOILS

The following discussions are based primarily on the *Cambria Emergency Water Supply Project Geotechnical Evaluation* (Geotechnical Evaluation) (CDM Smith, July 31, 2014).

8.3.a.1 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

**No Impact.** The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. As indicated in the State of California Special Studies Zones Map - San Simeon Quadrangle (July 1, 1986), the Project site is not affected by a State-designated Earthquake Fault Zone.<sup>3</sup>

Per SLO County General Plan Safety Element (pages 49 and 60), the Project site is located near the Nacimiento Fault Zone. The Nacimiento Fault Zone is an ill-defined, complex array of northwest trending faults of diverse types and ages. This zone separates the soft rocks of the Coastal Franciscan domain on the west from the primarily granitic rocks of the Salinian domain on the east. This zone "lies on trend, both locally and regionally with faults and fault zones generally identified as the Nacimiento fault along the southeastern portion and Sur-Nacimiento fault to the northwest. The Nacimiento fault zone is not a single fault line of specific age, but rather a complex zone of branching and discontinuous faults of diverse orientations, movement, and ages. The fault zone is more or less defined by a narrow sinuous outcrop band of Franciscan mélange. Although mapped as a regional fault, the Nacimiento fault zone is not included as part of the database maintained by the State of California (as discussed above). The fault does not have surficial features suggestive of Quaternary movement and is considered inactive. However, it is noted that the Bryson earthquake of 1952 is sometimes assigned to the Nacimiento fault zone, which contradicts this finding and would make the fault seismically active. The Bryson earthquake, which occurred in a rural area of northern San Luis Obispo County, is poorly understood and may be attributed to movement on other faults such as the active San Simeon or potentially active Rinconada fault zones.

Although the Project site is located near the Nacimiento Fault Zone, it does not traverse the Project site. Further, there is no published evidence of Holocene movement on strands of the Cambria fault within 200 feet of the Project site. Potentially active traces of the Cambria fault are mapped south of Santa Rosa Creek, 3.25 miles south of the Project site. Additionally, the Cambria Fault is not included on the State of California Alquist-Priolo Earthquake Fault Zone Map for the Cambria Triangle. Therefore, the Project does not expose people or structures to potential substantial adverse effects involving rupture of a known earthquake fault.

8.3.a.2 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

<u>Less Than Significant Impact</u>. According to CZLUO Section 23.07.080, *Geologic Study Area (GSA)*, a GSA Combining Designation is applied to areas where geologic and soil conditions could present new developments and their users with potential hazards to life and property, where a seismic

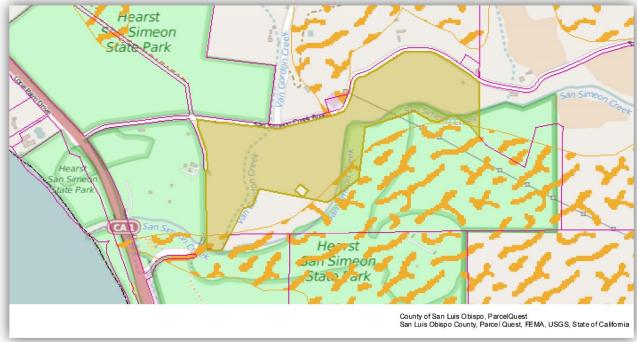
<sup>&</sup>lt;sup>3</sup> State of California, Department of Conservation, California Geological Survey, http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm, Accessed February 17, 2015.





hazard (Earthquake Fault Zone), landslide hazard, liquefaction hazard, or erosion/stability hazard (coastal bluffs) exist. As shown on the Permit View Combining Designation – Geologic Study Area Map below, only the extreme southern portions of the Project are designated GSA SRA.

## Permit View Combining Designation – Geologic Study Area Map



One Mitigation Measure (Project modification), the lagoon surface discharge extension, is proposed within the GSA designation. The proposed Project modification involves removing the existing discharge structure and extending the four-inch lagoon water filtrate pipeline to relocate the discharge point further south at the northern San Simeon Creek bank. As noted in Response 8.3.a.1 above, no Earthquake Fault Zone traverses the Project site. Additionally, the Project site does not contain coastal bluffs/cliffs. However, the north-central portion of the Project site has a high potential for landslide (the remainder, a low potential); see Response 8.3.a.4 below. Additionally, most of the Project site is classified as having a moderate potential for liquefaction; see Response 8.3.a.3 below.

The following LCP Policies for Hazards pertain to development within GSA: Policy 1, New Development (implemented as a standard), Policy 2, Erosion and Geologic Stability (implemented as a standard and pursuant to CZLUO Section 23.07.086), and Policy 3, Development Review in Hazard Areas (implemented pursuant to CZLUO Sections 23.07.082 and 23.07.084). According to CZLUO Section 23.07.082, Applicability of GSA Standards, the standards of CZLUO Sections 23.07.084 through 23.08.086 apply to all land uses for which a permit is required, with certain exceptions. CZLUO Section 23.07.084, Application Content - Geologic and Soils Report Required, specifies that all

land use permit applications for projects located within a GSA shall be accompanied by a report prepared by a certified engineering geologist and/or registered civil engineer (as to soils engineering), as appropriate. Finally, CZLUO Section 23.07.086(c), *Erosion and Geologic Stability*, specifies that new development shall insure structural stability while not creating or contributing to erosion, sedimentation or geologic instability.

According to the Geotechnical Evaluation, site seismicity was reviewed and historical earthquake within 62 miles of the site was identified using the computer program, EQSEARCH. There are three Holocene active faults in San Luis Obispo County that are zoned under the State of California Alquist-Priolo Earthquake Fault Zone: the San Simeon–Hosgri Fault; the San Andreas; and the Los Osos Fault. Other faults that have the potential to affect the Project site and Cambria area include the Cambria Fault, Oceanic Fault, and Nacimiento Fault. There are no known Holocene faults within 200 feet of the Project site. The closest active fault to the Project site is the San-Simeon-Hosgri Fault Zone, which consists of two fault zones: the San Simeon Fault Zone; and the Hosgri Fault Zone. The faults in this zone are believed to have a potential for seismic events of a Maximum Credible Earthquake (MCE) magnitude as high as 7.3. A peak ground acceleration of 0.52g was estimated for MCE.

The Geotechnical Evaluation concludes it is likely for at least one moderate to severe earthquake to occur at the site during the life of the Project. During a moderate to severe earthquake occurring on the nearby faults, strong ground shaking of the site will likely occur. Earthquakes on regional and/or local causative faults could expose people or the Project to strong seismic ground shaking. The intensity of ground shaking on the Project site depends on the magnitude of the earthquake, distance to the epicenter, and geology of the area between the epicenter and the Project site.

Numerous controls are imposed on the Project through the permitting process. In general, the County regulates development (and reduces potential seismic and geologic impacts) through compliance with the CZLUO (which implements the LCP) and San Luis Obispo County Code Title 19, San Luis Obispo County Building and Construction Ordinance (BCO). These regulations were established to protect and promote the public health, safety, and welfare. In compliance with CZLUO Section 23.07.084, a geologic and soils report (Cambria Emergency Water Supply Project Geotechnical Evaluation (Geotechnical Evaluation) (CDM Smith, July 31, 2014)) was prepared to assess the site's conditions concerning seismicity and geology. The Geotechnical Evaluation recommended techniques to establish minimum seismic design requirements and reduce seismic/geologic risks to less than significant levels. The Project (evaporation pond) involves a Class II Unit and as such, the MCE was used in the design. In compliance with CZLUO Section 23.07.086(c), the Geotechnical Evaluation's recommendations were implemented thereby ensuring structural stability. The SWF was designed and constructed in accordance with the Geotechnical Evaluation's recommendations, BCO regulations, and engineering practice guidelines for seismic design. Similarly, the proposed mitigation measures (Project modifications) were also designed and would be constructed in accordance with the Geotechnical Evaluation's recommendations, BCO regulations, and engineering practice guidelines for seismic design. Following compliance



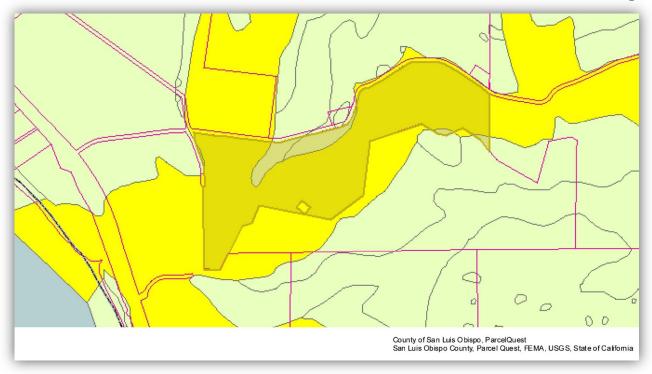


with the BCO and CZLUO (which implements the LCP) pertaining to seismic design, as well as the Geologic Investigation's recommendations, the Project results in a less than significant impact regarding the exposure of people or structures to substantial adverse effects involving strong seismic ground shaking.

# 8.3.a.3 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. The Seismic Hazards Mapping Act (SHMA) of 1990 directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction (as well as earthquake-induced landslides and amplified ground shaking). Seismic Hazard Zone Maps are produced to illustrate the designated Zones of Required Investigation (ZORI), which are areas prone to liquefaction and earthquake-induced landslides. Site-specific geotechnical investigations are required within the ZORI to identify and evaluate seismic hazards (i.e., liquefaction and earthquake induced landslides) and formulate mitigation measures prior to permitting most developments designed for human occupancy. According to the Seismic Hazards Zones Map, the Project Site is not located within a ZORI for liquefaction hazard.<sup>4</sup> However, as shown on the Permit View Environmental – Liquefaction Map below, most of the Project site is classified as having a moderate potential for liquefaction.

## Permit View Seismic Hazards Zones Map



<sup>&</sup>lt;sup>4</sup> State of California, Department of Conservation, California Geological Survey, http://www.quake.ca.gov/gmaps/WH/ regulatorymaps.htm, Accessed February 17, 2015.

According to the Geotechnical Investigation, at the Van Gordon Reservoir, loose layers of silty sand and sand with silt were encountered below the Van Gordon Reservoir bottom during borings. CDM concludes, liquefaction at the Van Gordon Reservoir level would be minimal, given the potentially liquefiable layers are capped with thicker layers of non-liquefiable soils. Further, as discussed in Response 8.3.a.2 above, a geologic investigation was prepared to assess the site's conditions concerning seismicity and geology. The SWF was designed and constructed in accordance with the Geotechnical Evaluation's recommendations, BCO regulations, and engineering practice guidelines for seismic design. Similarly, the proposed mitigation measures (Project modifications) were also designed and would be constructed in accordance with the Geotechnical Evaluation's recommendations, BCO regulations, and engineering practice guidelines for seismic design. More specifically, the Project was designed and constructed according to the California Geological Survey Special Publication 117A,<sup>5</sup> as well as the Southern California Earthquake Center's Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction Hazard in California (1999). Following compliance with the BCO and CZLUO pertaining to seismic design, as well as the Geologic Investigation recommendations, the Project results in a less than significant impact regarding the exposure of people or structures to substantial adverse effects involving liquefaction.

Additionally, the north-central portion of the Project site has a high potential for landslide, while the remainder of the site has a low potential; see Response 8.3.a.4 below.

8.3.a.4 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides?

<u>Less Than Significant Impact</u>. The Seismic Hazard Zone Maps, which illustrate the designated ZORI including areas prone to earthquake–induced landslides, indicate that the Project site is not located within a ZORI for earthquake-induced landslide hazard.<sup>6</sup> However, as shown on the Permit View Environmental – Landslide Map below, the north-central portion of the Project site has a high potential for landslide, while the remainder of the site has a low potential.

No improvement is proposed in the area designated as high potential for landslide. Notwithstanding, the Project was designed and constructed in accordance with the Geologic and Soils Report's recommendations, BCO regulations, and engineering practice guidelines for seismic design. Following compliance with the BCO and CZLUO pertaining to seismic design, as well as the Geologic Investigation recommendations, the Project results in a less than significant impact regarding the exposure of people or structures to substantial adverse effects involving landslides.

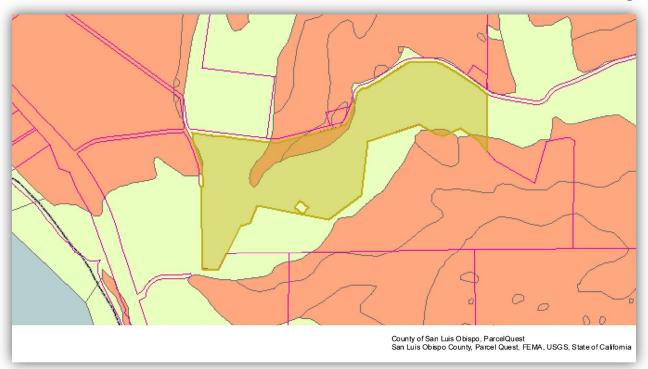
-

<sup>&</sup>lt;sup>5</sup> California Geological Survey Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, 2008.

<sup>&</sup>lt;sup>6</sup> State of California, Department of Conservation, California Geological Survey, http://www.quake.ca.gov/gmaps/WH/ regulatorymaps.htm, Accessed February 17, 2015.



## Permit View Environmental Landslide Map



## 8.3.b Would the project result in substantial soil erosion or the loss of topsoil existing visual character/quality of the site and its surroundings?

<u>Less Than Significant Impact</u>. Erosion is a natural process that occurs over time and can be caused by either wind or water moving over soils. However, soil erosion can become a problem when human activities accelerate the rate at which soils are displaced.

Based on the USDA Soil Survey, the Project site is underlain by the following soil units: Beaches, Capistrano sandy loam (rolling); Concepcion loam (5 to 9 percent slopes); Lodo clay loam (5 to 15 percent slopes); Los Osos loam (5 to 9 percent slopes); Los Osos loam (30 to 50 percent slopes); Los Osos-Diablo complex (15 to 30 percent slopes); Marimel sandy-clay loam (occasionally flooded); Riverwash; and Salinas silty clay loam (0 to 2 percent slopes). Further, for specific soils underlying the Van Gordon Reservoir, surface soils consist of silty and sandy clay.<sup>7</sup> Additionally, San Simeon Creek and Van Gordon Creek traverse the southeastern and western portions of the property, respectively.

Central Coast Laboratories, Soils Report for the Alternate Wastewater Reservoir Area on Van Gordon Creek, May 9, 1979.



## SUSTAINABLE WATER FACILITY

SWF implementation results in ground-disrupting activities, which temporarily disturb soils. Disturbed soils are susceptible to higher rates of erosion from wind, rain, and runoff. The Project involved a limited amount of grading. Approximately 50 cubic yards (CY) of cut and 50 CY of fill were generated during construction of the proposed wells and AWTP, and approximately 200 CY of cut and 200 CY of fill were generated during pipeline installation. Excavated soils were retained for backfill. Additionally, most of the pipeline was laid along the ground surface. Of the approximately 4,630 LF of pipeline, 4,150 LF were installed above grade and 480 LF were installed below grade. Earth-disturbing activities associated with SWF construction may result in soil erosion or the loss of topsoil. However, as concluded in *Hydrology and Water Quality* Section Impact 5.5-1, the SWF is subject to compliance with the National Pollutant Discharge Elimination System (NPDES) permitting process, which is administered through the State Water Resources Control Board Construction General Permit (Water Quality Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) since one or more acres of soil is being disturbed. The Project prepared and submitted a Notice of Intent and SWPPP to the SWRCB demonstrating compliance with the General Construction Permit.

Refer to Section 5.5, Hydrology and Water Quality, for a detailed discussion concerning the Project's potential water quality and erosion/sedimentation impacts. The SWF is also subject to compliance with CZLUO Chapter 23.05, Site Development Standards, which establishes standards for the preparation of sites for development and construction activities to protect against soil erosion. Specifically, CZLUO Sections 23.05.022 through 23.05.039 establish standards for grading and excavation activities to protect against erosion and the sedimentation of water courses. CZLUO Section 23.07.174, Streams and Riparian Vegetation, establishes standards intended to preserve and protect the natural hydrological system and ecological functions of coastal streams. Compliance with these CZLUO standards (as well as relevant LCP Policies) is achieved through compliance with NPDES requirements. Therefore, the Project results in a less than significant impact involving soil erosion. Refer also to Section 5.3, Biological Resources.

## MITIGATION MEASURES (PROJECT MODIFICATIONS)

The proposed Mitigation Measures (Project modifications) would require additional construction activities particularly involving construction of the SWTP and pipeline installation. The Project modifications would require additional minor earthwork to install 5,800 LF of pipeline (300 LF above grade and 5,500 LF below grade). Project modifications construction activities would be subject to compliance with CZLUO Chapter 23.05, *Site Development Standards*, pertaining to the protection against soil erosion during site preparation and construction. Compliance with all regulations pertaining to the NPDES permitting process would be required, reducing impacts in this regard to less than significant levels.





8.2.c Would the project 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?

**Less Than Significant Impact.** Refer also to Responses 8.3.a.3 and see Response 8.3.a.3 above.

There are no complex geologic features such as bedrock units, faults fractures, folds or others on the Project site. The Van Gordon Reservoir embankment for the existing berm consists of compacted berm fill placed during the original construction. Van Gordon Reservoir materials researched consist of berm fill derived from native materials and alluvium. Information on the characteristics of site soils and the engineering properties of the materials based on laboratory tests are provided in Geotechnical Investigation attachments. The existing Van Gordon Reservoir slopes are relatively flat with inclination generally on the order of 3 horizontal to 1 vertical (H:V) to 4:1 with height of approximately nine feet. Based on the limited height and relatively flat slope inclination across the entire Van Gordon Reservoir, analysis was performed at locations that represents the most critical and conservative scenario with the steepest slope inclination. The required slope stability analyses were performed under the supervision of a registered civil engineer using the SLOPE/W computer program. The Geotechnical Investigation concluded that the seismic slope stability factor of safety is in excess of the minimum required value of 1.5.

The topography at the Project site and in its immediate vicinity is generally flat except for a portion along San Simeon Monterey Creek Road and the berm along the Van Gordon Reservoir. The potential for lateral spreading at the Project site is considered low. Additionally, given the Project site's relatively flat topography, the potential for ground lurching is considered very low. Following compliance with the BCO and CZLUO pertaining to seismic design, as well as the Geologic Investigation recommendations, the Project results in a less than significant impact regarding the exposure of people or structures to substantial adverse effects involving unstable geologic units.

8.3.d Would the project be located on expansive soil, creating substantial risks to life or property?

<u>Less Than Significant Impact</u>. Some of the soils identified in Response 8.3.b exhibit a high shrink swell potential, thus, the Project components may be located on expansive soil. As discussed above, following compliance with the BCO and CZLUO, as well as the Geologic Investigation recommendations, the Project results in a less than significant concerning expansive soils.

8.3.e Would the project 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 waste water?

**No Impact.** The Project involves construction and operation of water facilities that do not generate wastewater or require disposal of wastewater. Therefore, the Project does not require

septic tanks or alternative wastewater disposal systems, and no impact occurs in this regard. The RO concentrate is disposed for evaporation in the evaporation pond and the MF backwash is discharged to the existing percolation ponds. Refer to <u>Section 5.5</u>, <u>Hydrology and Water Quality</u>, concerning potential impacts in this regard.

## 8.4 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

8.4.a Would the project generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment?

<u>Less Than Significant Impact</u>. Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. In actuality, Project GHG emissions would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

## Regulations and Significance Criteria

#### State

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent (CO2eq)<sup>8</sup> concentration is required to keep global mean warming below 2 degrees Celsius (°C), which in turn is assumed to be necessary to avoid dangerous climate change.

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels;
- 2020: Reduce GHG emissions to 1990 levels; and
- 2050: Reduce GHG emissions to 80 percent below 1990 levels.

Additionally, issued in April 2015, Executive Order B-30-15 requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. Assembly Bill (AB) 32 requires that the California Air Resources Board (CARB) determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons (MMT) of CO<sub>2</sub>eq.

-

<sup>&</sup>lt;sup>8</sup> Carbon Dioxide Equivalent (CO2eq) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.





Senate Bill (SB) 97 acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. This bill directs the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions (or the effects of GHG emissions), as required by CEQA. OPR published a technical advisory recommending that CEQA lead agencies make a good-faith effort to estimate the quantity of GHG emissions that would be generated by a proposed project. Specifically, based on available information, CEQA lead agencies should estimate the emissions associated with project-related vehicular traffic, energy consumption, water usage, and construction activities to determine whether projectlevel or cumulative impacts could occur, and should mitigate the impacts where feasible. OPR requested CARB technical staff to recommend a method for setting CEQA thresholds of significance as described in CEQA Guidelines Section 15064.7 that will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State. The Natural Resources Agency adopted the CEQA Guidelines Amendments prepared by OPR, as directed by SB 97. On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The CEQA Guidelines Amendments became effective on March 18, 2010.

## County of San Luis Obispo Air Pollution Control District

According to the San Luis Obispo County Air Pollution Control District (SLOAPCD) CEQA Air Quality Handbook (April 2012), SLOAPCD established significance thresholds for GHG emissions from project construction and operations. GHGs from construction projects must be quantified and amortized over the life of a project (i.e., 50 years for residential projects and 25 years for commercial projects). The amortized construction emissions are added to the annual average operational emissions and then compared to the operational thresholds of significance. The thresholds of significance for a project's amortized construction plus operational-related GHG emissions are:

- For land use development projects, the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,150 metric tons per year (MT/yr) of CO<sub>2</sub>eq; or 4.9 MT CO<sub>2</sub>eq/service population (SP)/yr (residents + employees). Land use development projects include residential, commercial and public land uses and facilities. Lead agencies may use any of the three options above to determine the significance of a project's GHG emission impact to a level of certainty.
- For stationary-source projects, the threshold is 10,000 metric tons per year (MT/yr) of CO<sub>2</sub>eq. Stationary-source projects include land uses that would accommodate processes and equipment that emit GHG emissions and would require an SLOAPCD permit to operate.





## SUSTAINABLE WATER FACILITY

Transport of materials and construction workers to and from the Project site results in GHG emissions. SWF construction activities are temporary in nature. SWF operations do not result in any new sources of operational GHG emissions, as the facilities are electronically operated. Vehicle trips are nominal and only associated with maintenance and inspection activities. Consequently, SWF-related GHG emissions are only from construction activities and energy consumption for equipment operations. The analysis of GHG emissions has been prepared utilizing the California Emissions Estimator Model (CalEEMod) computer program. Table 8-1, SWF Estimated Greenhouse Gas Emissions, presents the estimated CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub> emissions. The CalEEMod outputs are contained within the Appendix D, Air Quality/Greenhouse Gas Data.

Table 8-1 SWF Estimated Greenhouse Gas Emissions

0	CO <sub>2</sub> CH <sub>4</sub>		N <sub>2</sub> O		Total	
Source	MT/yr¹	MT/yr <sup>1</sup>	MTCO2eq/yr2	MT/yr <sup>1</sup>	MTCO <sub>2</sub> eq/yr <sup>2</sup>	MTCO₂eq/yr
Direct Emissions <sup>3</sup>						
<ul> <li>Construction (amortized over 25 years)</li> </ul>	11.68	0.00	0.07	0.00	0.00	11.74
Total Unmitigated Direct Emissions <sup>4</sup>	11.68	0.00	0.07	0.00	0.00	11.74
Indirect Emissions <sup>5</sup>						
Energy	426.04	0.02	0.49	0.00	1.21	427.74
Total Unmitigated Indirect Emissions <sup>4</sup>	426.04	0.02	0.49	0.00	1.21	427.74
Total Unmitigated Emissions <sup>4</sup>	439.48 MTCO₂eq/yr					
SLOAPCD Threshold	10,000 MTCO₂eq/yr					
Threshold Exceeded?	Threshold Exceeded? No					

### Notes:

- 1. Emissions calculated using California Emissions Estimator Model (CalEEMod).
- 2. Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed October 12, 2015.
- 3. The SWF involves water facilities does not include other direct emissions including area source or mobile source emissions.
- 4. Totals may be slightly off due to rounding.
- 5. SWF-related indirect emissions that occur from energy consumption are based on emissions factors from CalEEMod. Refer to <u>Section 3.0</u>, <u>Project Description</u>, for a detailed description of the electric load from the equipment. The SWF does not include other indirect emissions.

Refer to Appendix D, Air Quality/Greenhouse Gas Data, for detailed model input/output data

<u>Construction Emissions</u>. Per the SLOAPCD *CEQA Air Quality Handbook*, construction GHG emissions are summed and amortized over 25 years. As indicated in <u>Table 8-1</u>, SWF construction-related activities result in 11.74 MTCO<sub>2</sub>eq when amortized over 25 years.

<u>Energy Consumption</u>. SWF energy consumption emissions were calculated using CalEEMod and specific energy consumption data for all of the equipment. Electricity is provided to the site via Pacific Gas & Electric. The SWF indirectly results in 427.74 MTCO<sub>2</sub>eq/year due to energy consumption; refer to <u>Table 8-1</u>.





As indicated in <u>Table 8-1</u>, the SWF results in a total of 439.48 MTCO<sub>2</sub>eq/yr, which is well below the 10,000 MTCO<sub>2</sub>eq/year screening threshold. As GHG emissions from SWF construction are minimal and less than the GHG emissions threshold adopted by the SLOAPCD, a less than significant impact occurs in this regard.

## **MITIGATION MEASURES (PROJECT MODIFICATIONS)**

The proposed mitigation measures (Project modifications) would require construction-related activities to decommission the spray evaporator system, dispose of RO concentrate from the evaporation pond (prior to conversion to a potable water supply storage basin), construct the SWTP, and construct the conveyance pipelines. The mitigation measures (Project modifications) also include energy emissions associated with operations of the SWTP. <u>Table 8-2</u>, <u>Total Greenhouse Gas Emissions with Mitigation Measures (Project Modifications)</u>, provides the construction and operational emissions of the total Project (SWF plus the mitigation measures (Project modifications (i.e., energy consumption from SWTP operations, and truck trips from operational RO concentrate disposal)). As indicated in <u>Table 8-2</u>, with the implementation of the Project modifications, the GHG emissions would total 909.93 MTCO<sub>2</sub>eq/yr, which is well below the 10,000 MTCO<sub>2</sub>eq/year screening threshold. Therefore, a less than significant impact would occur in this regard.

Table 8-2
Total Greenhouse Gas Emissions With Mitigation Measures (Project Modifications)

٥	CO <sub>2</sub> CH <sub>4</sub>		N <sub>2</sub> O		Total			
Source	MT/yr	MT/yr	MTCO2eq/yr1	MT/yr	MTCO2eq/yr1	MTCO₂eq/yr		
Direct Emissions								
AWTP Construction <sup>2</sup> (amortized over 25 years)	11.68	0.00	0.07	0.00	0.00	11.74		
<ul> <li>SWTP Construction<sup>2</sup> (amortized over 25 years)</li> </ul>	14.63	0.00	0.01	0.00	0.00	14.64		
Operational RO concentrate Disposal/Hauling Mobile Emissions <sup>3</sup>	439.39	0.00	0.00	0.00	0.00	439.39		
Total Unmitigated Direct Emissions4	465.70	0.00	0.08	0.00	0.00	465.77		
Indirect Emissions <sup>5</sup>								
AWTP Energy	74.97	0.00	0.09	0.00	0.21	75.26		
SWTP Energy	367.44	0.02	0.42	0.00	1.04	368.90		
Total Unmitigated Indirect Emissions <sup>4</sup>	454.41	0.00	0.51	0.00	1.25	444.16		
Total Unmitigated Emissions <sup>4</sup>	909.93 MTCO₂eg/yr							
SLOAPCD Threshold	10,000 MTCO₂eq/yr							
Threshold Exceeded?	Threshold Exceeded? No							

#### Notes:

- 1. Carbon dioxide equivalent values calculated using the United States Environmental Protection Agency Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed July 12, 2016.
- 2. Construction emissions were calculated using California Emissions Estimator Model (CalEEMod). SWTP construction includes 2,350 total truck trips to dispose of the RO concentrate from the evaporation pond (prior to conversion to a potable water supply storage basin).
- 3. Operational mobile source emissions were calculated with CARB EMFAC2014 and are based on eight heavy duty water truck round trips per day to dispose of the operational RO concentrate.
- Totals may be slightly off due to rounding.
- Project-related indirect emissions from energy consumption are based on emissions factors from CalEEMod. Refer to <u>Section 3.0</u>, <u>Project Description</u>, for a detailed description of the electric load from the proposed equipment.

Refer to Appendix D, Air Quality/Greenhouse Gas Data, for detailed model input/output data.

8.4.b Would the project conflict with an applicable greenhouse gas reduction plan, policy, or regulation?

Less Than Significant Impact. On November 22, 2011, the County adopted Energy Wise Plan Designing Energy and Climate Solutions for the Future, a Climate Action Plan that addresses the challenges of climate change by reducing local GHG emissions and preparing the County to adapt to a changing climate. The Plan outlines the County's approach to reducing GHG emissions through a number of goals, measures, and actions that provide a road map to achieving the County's GHG reduction target of 15 percent below baseline levels by 2020. The Project does not conflict with the CAP, as it does not change the County's land use. Therefore, the Project does not conflict with an adopted plan, policy, or regulation pertaining to GHGs. Also, the Project results in GHG emissions that are below the CEQA threshold of 10,000 MTCO2eq/yr. Thus, a less than significant impact occurs in this regard.

8.4.c Would the greenhouse gas emissions generated by the proposed project and other related cumulative projects have a significant impact on global climate change?

<u>Less Than Significant Impact</u>. As discussed above, the Project does not result in a significant impact regarding GHG emissions.

## 8.5 HAZARDS AND HAZARDOUS MATERIALS

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

Less Than Significant Impact.

## SUSTAINABLE WATER FACILITY

The SWF includes an AWTP that treats brackish water to produce potable water. As described in Section 3.4, the AWTP consists of multiple unit processes including microfiltration (MF) or ultrafiltration (UF), reverse osmosis (RO), advance oxidation process (AOP) utilizing ultraviolet (UV) light, and hydrogen peroxide (H2O2), and pre- and post-treatment chemical additions to the treated water before it is conveyed to RIW for recharge. The pre-treatment involves addition of ammonium hydroxide and sodium hypochlorite. The RO facility includes pre-treatment chemical addition (antiscalant and sulfuric acid for scale control). The UV disinfection process includes addition of hydrogen peroxide. The post-treatment strategy includes addition of calcium chloride and caustic soda. All solutions are stored within the AWTP. All solutions are delivered to the AWTP in closed containers and are handled within the AWTP. Any potential spill is entirely contained within the AWTP area, in compliance with the regulations discussed below.





The RO concentrate is evaporated via natural evaporation as well as mechanical spray evaporators. Over time, the dissolved salt concentration in the evaporation pond increases until it begins to precipitate from solution. The RO concentrate generated by the AWTP is not a hazardous material. Notwithstanding, the super-concentrated waste, whether liquid or solid, would be removed from the site for disposal. In concentrated slurry form, the waste is pumped to trucks and hauled away for disposal at a licensed disposal site. In dried solids form, the solids accumulated on evaporation pond bottoms are removed manually using shovels and barrels and disposed offsite at a licensed disposal site. See also <u>Section 5.3</u>, <u>Biological Resources</u>, for recommended mitigation.

The San Luis Obispo County Environmental Health Department (SLO EHD) is the Certified Unified Program Agency (CUPA) for the County. Monitoring of the AWTP with respect to the use of hazardous materials is the primary responsibility of the SLO EHD, as well as the Central Coast Regional Water Quality Control Board (CCRWQCB). All hazardous materials or chemicals used at the AWTP are filed on record with the SLO EHD (the designated CUPA) and California Department of Forestry (CDF), and are routinely inspected to ensure that the materials are being stored, handled, and used in accordance with all applicable Federal, State, and local standards and regulations to reduce the potential for a hazardous materials incident. Transportation of all hazardous materials to/from the site are also subject to compliance with all applicable Caltrans protocols. Additionally, facilities containing hazardous materials for transport, storage, or use comply with all County, OSHA, Cal EPA, and U.S. EPA requirements.

The AWTP incorporates leak and spill containment measures to minimize the risk of upset to both onsite employees and surrounding areas, as required by existing CUPA regulations. An Operations, Maintenance and Monitoring Plan (OMMP) (CDM Smith, January 6, 2015) was prepared for the Project. The OMMP covers the Project facilities and treatment systems constructed for the AWTP.

OMMP Section 13 includes the Operations and Maintenance Staffing Plans. The AWTP is classified as a T3, which requires a Grade T3 chief water operator and Grade T2 shift water operator. The chief operator is the person who has overall responsibility for the day-to-day operation of the treatment facility. The shift operator is the person in direct charge of the operation of the treatment facility for a specific period of a day. During the first six months of operation, the CCSD will provide a trained operator at the AWTP site at all times when the facility is in operation producing water. Following the first six months of operation, the CCSD will submit a request to the DDW and the RWQCB for an alternative operator schedule, and, if approved, update the OMMP.

OMMP Section 14 includes the Maintenance Plan. Routine daily maintenance performed by shift operators, by conducting a "walk-through" of the entire plant, review of logs, and respond to computer generated alarms. All on-line analyzer readings verified, and buffers and reagents filled. The operator makes minor spot repairs as required. All other needed repairs are noted and referred to the Water Treatment Maintenance Group for action.

Preventive maintenance is performed by the shift operations and maintenance groups. All maintenance activities are performed according to the manufacturer specifications and recommendations. Maintenance/calibration is scheduled, tracked, and recorded using an asset management system. All maintenance activities are recorded, tracked, and evaluated. Minimum system activities are summarized in OMMP Table 14-1.

OMMP Section 16 includes the Contingency Plan. The AWTP and RIW systems operate on the condition that it causes no impairment to the groundwater basin. This section describes the system controls, reliability, and redundancy features built into the AWTP, and contingency plans for the RIW system in case of off-spec water quality, source control upsets, power failures, and other emergency conditions. In case of any impairment related to the AWTP, RIW system will be shut down. While AWTP is not a critical facility and has the ability to shut-down at any time, the process facilities are provided with redundancy to continue to operate at capacity when certain units are offline for maintenance or cleaning. Equipment redundancy is identified in the design criteria for the unit processes shown in OMMP Sections 2 through 10.

OMMP Section 17 summarizes the Emergency Response Plan, which is included in OMMP Appendix D. OMMP Table 17.1 identifies personnel to call when an after-hours emergency occurs at the facility. The operations personnel notified will decide as to whether the emergency requires the services of any duty maintenance staff. Chemicals stored at the AWTP are summarized in OMMP Table 17-2. The bulk storage tanks and chemical piping are double walled to contain leaks in case primary containment wall fails. In addition, the metering pumps are installed on skids with containment curbs that could hold small leaks. As shown in OMMP Table 14-1, Operators will inspect tanks and piping for leaks daily. Uncontrolled releases, such as accidental spills from leaking tanks, pipes, pumps, or overfilling of tanks, would be responded to by trained personnel using the specified procedures, which instruct on how to stop flow, what to wear, and how to approach, contain, dilute/neutralize, dispose of, and clean up spill.

The AWTP operator is required to develop hazardous waste management and safety plans in accordance with County, OSHA, and U.S. EPA requirements. In San Luis Obispo County, the Department of Environmental Health serves as the area's Certified Unified Program Agency (CUPA). A CUPA is a local agency that has been certified by Cal EPA to implement and regulate the state environmental programs within the local agency's jurisdiction. This is managed in part by the County's management of an online database and web site portal for filing such plans. This planning effort and filing was completed by the CCSD via the County run web portal, prior to SWF operations. Additionally, CalFire inspected the facilities and made several safety related recommendations that CCSD also incorporated into the SWF. The completion and filing of the hazardous waste management and safety plans by the CCSD was in conformance with OSHA regulation 29 CFR 1910.119, to prevent/minimize the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Because the AWTP stores hazardous materials onsite, it complies with EPA Risk Management Planning (RMP) Rule 40 CFR 68, which requires





the AWTP operator to register the facility with the EPA before onsite storage of hazardous chemicals. This was completed with the County serving as the area's CUPA.

The AWTP requires the transport of hazardous materials via truck. Transportation of hazardous materials/wastes is regulated by California Code of Regulations (CCR) Title 26. The United States Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling and routing). The California Highway Patrol and California Department of Transportation enforce the federal and state regulations and respond to hazardous materials transportation emergencies. SWF hazardous materials transport complies with all regulatory requirements for truck transport to minimize potential spills and/or mishandling of hazardous materials.

The potential exists for hazardous materials to be accidentally released during SWF operations. However, as previously noted, facilities that store, handle, or transport hazardous materials are required to procure business plans and adhere to strict procedures enforced by agencies with jurisdiction over businesses or areas that routinely use or handle hazardous materials. During operations, all standards required by the SLO EHD, EPA, DTSC, and CDF are implemented.

Compliance with the regulatory requirements described above ensures that the Project does not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

## MITIGATION MEASURES (PROJECT MODIFICATIONS)

The proposed Mitigation Measures (Project modifications) would decommission the spray evaporator system and require additional hauling of RO concentrate materials to the Kettleman Hills Hazardous Waste Facility (Kettleman Facility) for treatment and disposal. Kettleman is a fully permitted 1,600 acre hazardous waste treatment, storage, and disposal facility operated by Waste Management, Inc.

All proposed transport activities would be required to follow federal and state laws and regulations regarding the transport of hazardous materials. As previously noted, transportation of hazardous materials/wastes is regulated by CCR Title 26. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling and routing). The California Highway Patrol and California Department of Transportation enforce the federal and state regulations and respond to hazardous materials transportation emergencies. With adherence to the laws and regulations regarding the handling, transport, and disposal of hazardous materials, the proposed Project modifications would not create a significant hazard to the public or the environment. As such, impacts related to the offsite hauling and disposal of RO concentrate materials during operations would be less than significant.

8.5.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?

<u>Less Than Significant Impact</u>. Due to the use of chemicals in the processes described above, the potential exists for accidental release of these materials into the environment. However, compliance with the regulatory framework ensures that the Project does not create a significant hazard to the public or the environment through the accidental release of hazardous materials. Refer to Response 8.5.a.

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

<u>No Impact</u>. As concluded in Response 8.4.a, the Project involves the routine transport and use of hazardous materials. However, the Project does not emit hazardous emissions and there are no existing or proposed schools within 0.25 miles of the Project site.

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

**No Impact.** The Project site is not included on a list of hazardous materials sites. Therefore, the Project does not be located on such a site.

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

**No Impact.** The Project site is located approximately 37 miles northwest of the San Luis Obispo County Regional Airport and is not located within the *Airport Land Use Plan for the San Luis Obispo County Regional Airport*. Therefore, the Project does not expose people working on the Project site to safety hazards associated with aircraft.

8.5.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?

**No Impact.** The Rancho San Simeon Airport is located approximately six miles northwest of the Project site. Only up to two employees visit the SWF site daily to visually inspect and maintain the AWTP. Therefore, the Project does not expose people working on the Project site to safety hazards associated with aircraft.



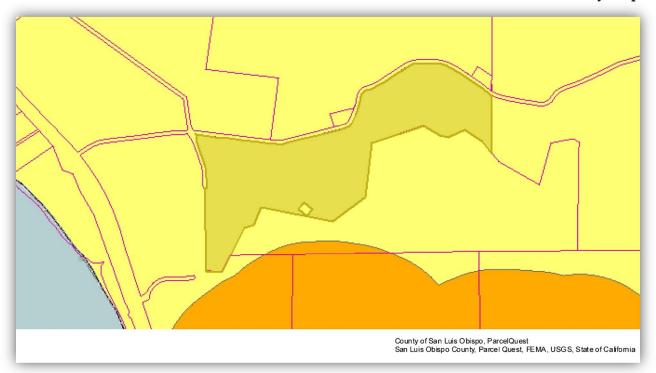
## 8.5.g Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**No Impact.** San Simeon - Monterey Creek Road and Van Gordon Creek Road, which form the Project site's northern and western boundaries, are remote rural roads that do not form part of an emergency evacuation plan. Additionally, the proposed water facilities are located entirely within the existing water facilities site. Therefore, the Project does not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

8.5.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?

<u>Less Than Significant Impact</u>. According to FRAP's Fire Hazard Severity Zones in SRA (State Responsibility Area) Map (also see Permit View Fire Hazard Severity Map below), the Project site is located in a "Moderate" fire hazard zone. Additionally, according to the County's Natural Hazard Disclosure (Fire) Map, the Project site is within a "wildland area[s] that may contain substantial forest fire risks and hazards."

## Permit View Fire Hazard Severity Map



Up to two employees are at the site daily to visually inspect and maintain the Project. The Project could expose structures to a significant risk involving wildland fires. The California Department of Forestry (CDF) and Fire Protection provides fire protection for State Responsibility Areas and, as the County Fire Department, protects most unincorporated areas within the County. The Project is subject to review by CDF/County Fire, which has an inspection process in place to ensure compliance with Fire and Safety Codes. Therefore, given the nature and scope of the proposed water facilities, and since they are subject to review by CDF/County Fire, the Project results in a less than significant impact involving the exposure of people or structures to a significant risk involving wildland fires.

## 8.6 HYDROLOGY AND WATER QUALITY

8.6.a Place housing within a 100-year flood hazard area as mapped on a federal flood hazard boundary or flood insurance rate map or other hazard delineation map?

**No Impact.** The Project involves construction and operation of water facilities- no housing is proposed. Therefore, the Project would not place housing within a 100-year flood hazard area.

8.6.b 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?

<u>No Impact.</u> Operating and maintaining the equipment requires two onsite staff. Additionally, there are no levees or dams located in the Project's vicinity. Therefore, the Project would not expose people or structures to a significant risk involving flooding as a result of the failure of a levee or dam.

## 8.7 LAND USE AND PLANNING

## 8.7.a Physically divide an established community?

**No Impact.** The Project involves construction and operation of water facilities entirely within an existing CCSD public utility site. Also, the Project site is located in a rural area; there are no established communities located in the Project vicinity. Therefore, the Project would not physically divide an established community.

8.7.c Conflict with any applicable habitat conservation plan or natural community conservation plan?

<u>No Impact</u>. The 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. There are currently no Habitat Conservation Plans that pertain



to the Project site. The Project site is located outside of the nearby Hearst Ranch Conservation Plan. Therefore, the Project would not conflict with the provisions of any local, regional, or state Habitat Conservation Plans.

## 8.8 MINERAL RESOURCES

8.8.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?

<u>No Impact</u>. The County's EX (Energy or Extractive Resource Area) and EX1 (Extractive Resource Area) Combining Designations include areas that have been identified as containing or likely to contain significant mineral resources; see Conservation Element Figure MN-2, *Energy and Extractive Resource Area Locations (EX and EX1)*. As shown, the Project site does not contain known mineral resources. Therefore; the Project does not result in the loss of availability of a known mineral resource.

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

**No Impact.** Conservation Element Figure MN-1, *Mining (SMARA) Locations*, shows the locations of the County's existing mines and indicates none are located on the Project site. Therefore, Project implementation does not result in the loss of a locally important mineral resource recovery site.

## 8.9 POPULATION AND HOUSING

8.9.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)?

<u>No Impact</u>. The Project involves design and construction of water facilities, thus, would not induce substantial population growth in the area, directly by proposing new homes or businesses. The Project does proposed water infrastructure. Refer to <u>Section 6.3</u>, <u>Growth-Inducing Impacts</u>, for a discussion of the Project's potential growth-inducing impacts.

- 8.9.a Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- 8.9.b Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<u>No Impact</u>. There is no housing or other development on the Project site. Therefore, the Project does not displace existing housing or persons, or necessitate the construction of replacement housing elsewhere.

## 8.10 PUBLIC SERVICES

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

<u>Less Than Significant Impact</u>. Due to the nature and scope of the proposed water facilities, Project implementation does result in a nominal increase in the demand for fire and police protection services. The Project does not affect existing service ratios or response times, and new governmental facilities are not required. The proposed facilities do not increase the demand for fire or police protection.

- 8.10.b 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:
  - Schools?
  - Parks?
  - Other public facilities?

**No Impact.** The Project involves construction of water facilities to address an existing water supply shortage while improving reliability of the existing water supply. The Project does not involve the construction of schools, parks, or other government facilities. Housing and employment-generating land uses are not proposed, thus, the Project does not create a demand for new schools, parks, or other government facilities.

## 8.11 RECREATION

8.11.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?





8.11.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?

<u>No Impact.</u> The Project involves construction of water facilities to address an existing water supply shortage while improving reliability of the existing water supply. Housing and employment-generating land uses are not proposed, thus, the Project does not increase the use of existing recreational facilities. The Project does not include recreational facilities.

## 8.12 TRANSPORTATION/TRAFFIC

- 8.12.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?
- 8.12.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?

<u>Less Than Significant Impact</u>. The Project involves construction and operation of water facilities at the CCSD's existing San Simeon well field and percolation pond system property. Construction access to the Project site is provided along the northern site boundary via San Simeon - Monterey Creek Road, and along the western site boundary Van Gordon Creek Road.

## SUSTAINABLE WATER FACILITY

Per E-CDP Condition 5, SWF construction activities were completed within 180 days from the issuance of the E-CDP. During SWF Project construction, movement of equipment and workers to and from the site temporarily increased traffic volumes along access routes. The primary heavy construction equipment and vehicles were moved on-site during the initial construction phase and removed during the final construction phase; thus, daily truck trips were not generated. Additionally, daily commuting of construction workers did not represent a substantial percentage of current daily traffic volumes along access routes. Based on the nominal amount of daily work trips required for SWF construction, construction worker trips do not substantially contribute to or affect levels of service on area roadways. Additionally, operating and maintaining the SWF Project requires two onsite full time staff. Therefore, given the short duration of construction activities, the nature and scope of the SWF, and since traffic volumes associated with the facilities is nominal, the SWF does not conflict with an applicable plan,

ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The SWF does not significantly impact intersections, streets, highways, freeways, mass transit, or Congestion Management Program (CMP) facilities. Additionally, the SWF does not impact pedestrian or bicycle paths, since none are located on or immediately adjacent to the Project site.

## **MITIGATION MEASURES (PROJECT MODIFICATIONS)**

During construction of Project modifications, movement of equipment and workers to and from the site would temporarily increase traffic volumes along access routes. The primary heavy construction equipment and vehicles would be moved on-site during the initial construction phase and removed during the final construction phase. Daily commuting of construction workers would did not represent a substantial percentage of current daily traffic volumes along access routes.

As part of its repurposing to a potable water supply storage basin, the evaporation pond would be emptied of the RO concentrate. The RO concentrate and the residual slurry would be transported for disposal at an appropriate Class II waste disposal facility. This is a one-time event and the number of truck trips required to empty the evaporation pond would vary depending on the volume of RO concentrate present when evaporation pond decommissioning begins. Construction phasing is structured such that either the evaporation pond would be empty or the proposed Baker tanks would be online when evaporation pond decommissioning begins. The dirty water would similarly be transported for offsite disposal. For purposes of conducting a conservative analysis of the potential traffic impacts associated with emptying the evaporation pond, this analysis assumes the following: the evaporation pond would be full (6.96 mg); 6,000 gallon capacity trucks would be used; 1,160 truck trips would be required over 60 days; the residual RO concentrate would be transported to a disposal site, such as Kettleman Hills, which is located approximately 85 miles from the Project site. In total, 2,350 round trucks trips from decommissioning the evaporation pond (2,320 round trips from evaporation pond RO concentrate disposal and 30 trips from decommissioning the spray evaporators). As these transport activities would occur over approximately 80 days, a total of 30 daily trips (approximately four per hour). Given these are a short-term impact, and since the trips would occur over approximately 80 days, The Project modifications construction traffic would not significantly impact intersections, streets, highways, freeways, mass transit, or CMP facilities.

Concentrate from the RO treatment process would be transported to a disposal site, such as the Kettleman Hills Hazardous Waste Facility (Kettleman Hills), which is located approximately 85 miles from the Project site.<sup>9</sup> It is unlikely that the Project would require 24/7 operation for extended periods throughout the year. However, for purposes of conducting a conservative analysis of the potential traffic impacts associated with offsite RO concentrate disposal, it is assumed the SWF would operate 24/7, during the driest time of the year (approximately six

\_

<sup>&</sup>lt;sup>9</sup> Kettleman Hills is located at 35251 Old Skyline Road, Kettleman City, California 93239.





months). Under this scenario, ten truck trips per day (limited to operating within the SWF site between the hours of 7 AM and 7 PM) would be needed to transport the RO concentrate to Kettleman Hills, assuming a 6,000 gallon truck would be used. Based on the nominal amount of daily trips required for offsite disposal of RO concentrate, this activity would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Offsite RO concentrate disposal would not significantly impact intersections, streets, highways, freeways, mass transit, or Congestion Management Program (CMP) facilities. Additionally, the Project modifications would not impact pedestrian or bicycle paths, since none are located on or immediately adjacent to the Project site.

8.12.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?

**No Impact.** Given the nature and scope of the proposed water facilities, the Project does not result in any change in air traffic patterns or traffic levels.

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

*No Impact.* The Project does not involve construction of transportation-related or other improvements that would increase hazards.

The Project site is designated Agriculture (AG) and the proposed water facilities (Public Utility Facilities)<sup>10</sup> are allowable uses in AG-designated sites, according to Coastal Table O. Additionally, the proposed water facilities are constructed within an existing public utility site that already contains the San Simeon well field, percolation pond system, and Van Gordon Reservoir. Therefore, the Project does not substantially increase hazards due to incompatible uses.

## 8.12.e Result in inadequate emergency access?

**No Impact.** Access to the Project site continues to be provided along the northern site boundary, via San Simeon - Monterey Creek Road. The Project does not result in inadequate emergency access.

8.12.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?

\_

<sup>&</sup>lt;sup>10</sup> Public Utility Facilities [J5] include public water system wells, treatment plants, and storage, and community wastewater treatment plants, settling ponds, and disposal fields, among other (see Coastal Zone Framework for Planning Excerpts Land Use Definitions).





<u>No Impact</u>. The Project does not involve the construction of public transit, bicycle, or pedestrian facilities. Housing and employment-generating land uses are not proposed, thus, the Project does not create a demand for new public transit, bicycle, or pedestrian facilities. Additionally, there are no public transit, bicycle, or pedestrian facilities located on or immediately adjacent to the Project site. Therefore, the Project does not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

## 8.13 UTILITIES AND SERVICE SYSTEMS

8.13.a 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?

**No Impact.** Due to the Project's nature and scope, construction of new storm water drainage facilities or the expansion of existing facilities are not proposed.

8.13.b Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<u>Less Than Significant Impact</u>. The Project does not involve development of land uses that create a demand for water. The Project involves construction of water facilities to address an existing water supply shortage, while improving reliability of the existing water supply. Also see Response 8.9.a. Because the Project does not involve development of land uses that create a demand for water, new or expanded entitlements are not needed.

8.13.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 generation in addition to the provider's existing commitments?

<u>No Impact</u>. The Project does not involve development of land uses that generate wastewater; therefore, the Project does not impact the capacity of CCSD's wastewater treatment facility. Refer also to Responses 8.13.a and 8.13.b above.

- 8.13.d Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- 8.13.e Comply with federal, state, and local statutes and regulations related to solid waste?

<u>No Impact</u>. The Project does not involve development of land uses that generate solid waste; therefore, the Project does not impact a landfill's capacity or conflict with solid waste regulations. Refer to Response 8.5.a regarding the Project's RO concentrate disposal requirements.



## **8.14 SOURCES CITED**

- California Geological Survey Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, 2008.
- Central Coast Laboratories, Soils Report for the Alternate Wastewater Reservoir Area on Van Gordon Creek, dated May 9, 1979.
- County of San Luis Obispo Website, http://www.slocounty.ca.gov/planning/zoning/Map\_Image\_Download\_Center/Natural\_Resources\_Maps.htm, Accessed May 16, 2014.
- State of California, Department of Conservation, California Geological Survey, http://www.quake.ca.gov/gmaps/WH/ regulatorymaps.htm, Accessed February 17, 2015.
- Written Communication: Robert C. Gresens, P.E., District Engineer, Cambria Community Services District, June 5, 2014.