



## TOWN OF DISCOVERY BAY INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

**PROJECT TITLE:** Sewage Treatment Plants, Denitrification and Master Plan Upgrades Project

**LEAD AGENCY NAME AND ADDRESS:** Town of Discovery Bay Community Services District, 1800 Willow Lake Road, Discovery Bay, CA 94505.

**CONTACT PERSON:** Mike Yeraka, PE. Projects Manager [myeraka@todb.ca.gov](mailto:myeraka@todb.ca.gov) Ph: 925-775-5028

**PROJECT LOCATION:** 2500 Channel Rd. (Plant #1) and 17501 Highway 4 (Plant #2) Discovery Bay California 94505

**PROJECT SPONSOR'S NAME and ADDRESS:** Town of Discovery Bay, 1800 Willow Lake Rd. Discovery Bay, CA 94505

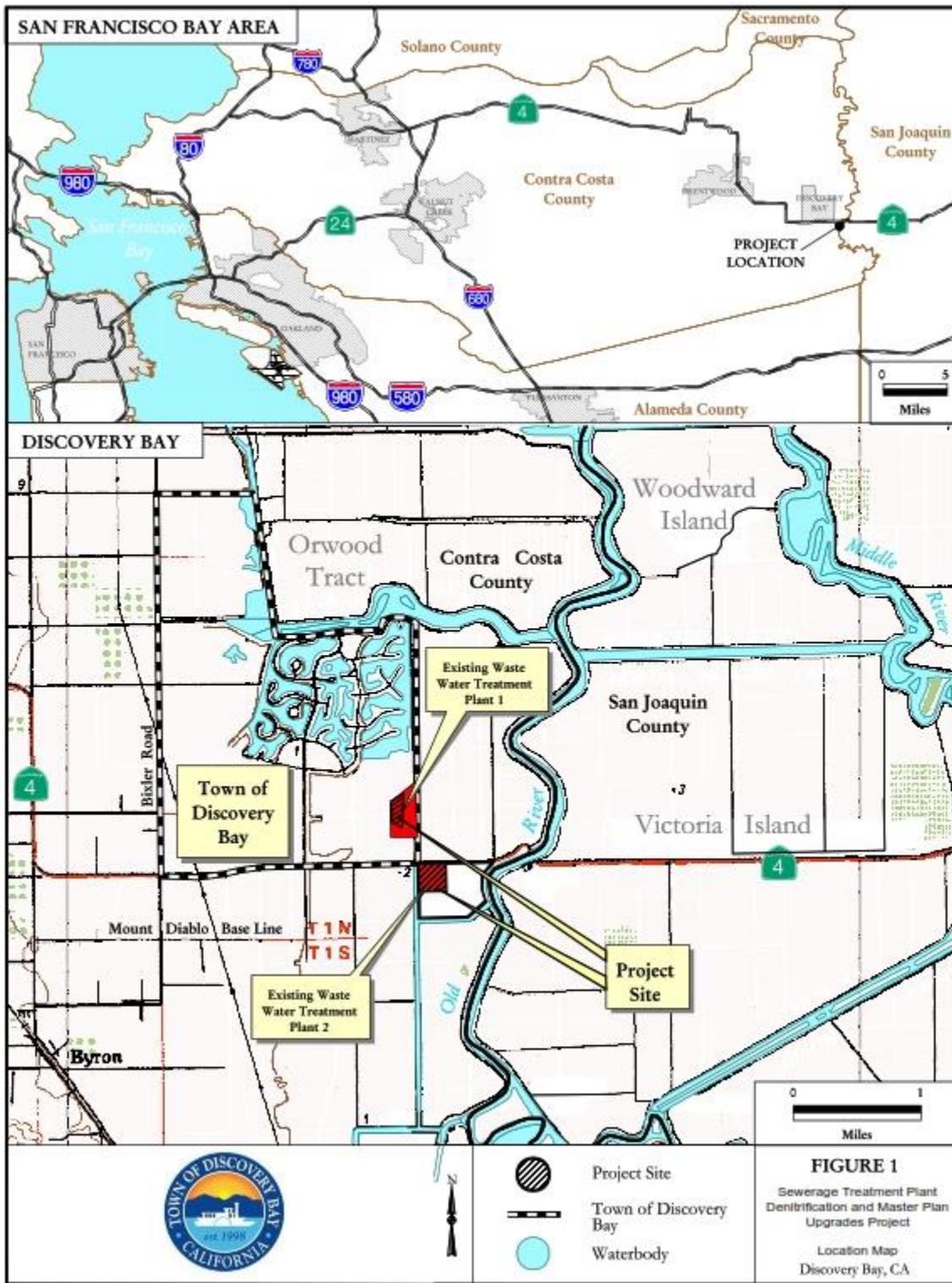
**GENERAL PLAN DESIGNATION:** The project locations are identified as Public/Semi Public on the Contra Costa County General Plan Land Use Element Map

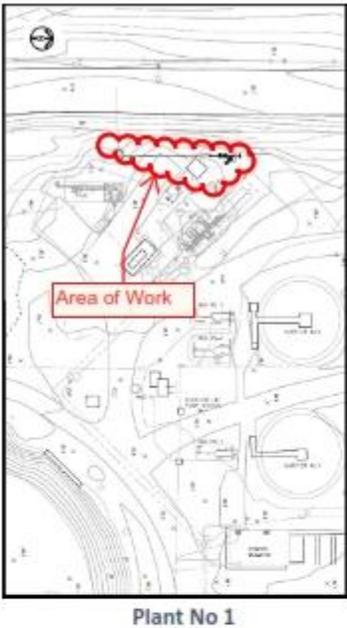
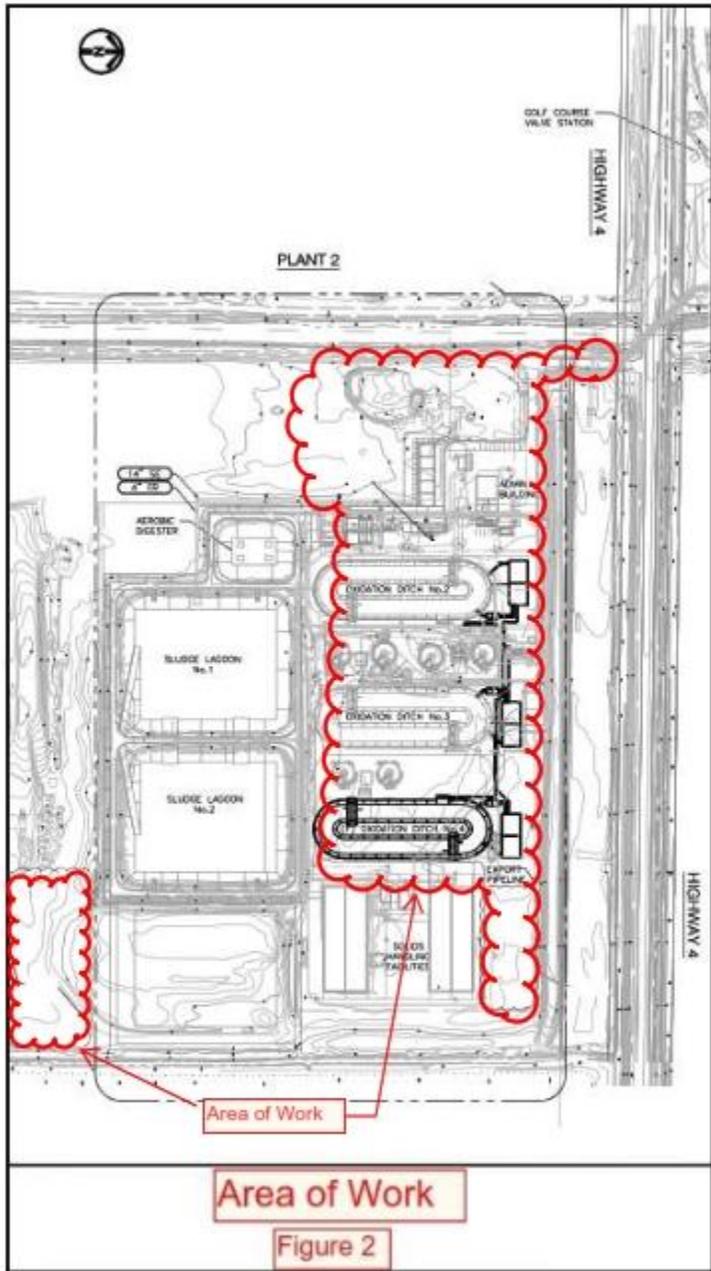
**ZONING:** P-1 for Plant #1 and A-3 for Plant #2.

### **DESCRIPTION of PROJECT:**

The Town of Discovery Bay community Services District is making modifications to its wastewater treatment plants to comply with new National Pollution Discharge Elimination System (NPDES) permit changes. Changes include modifying the process to reduce effluent total nitrogen below 10 mg/l. Process improvements will take place within the existing fence line at Wastewater Treatment Plant No. 2 at 17501 Highway 4 Discovery Bay, CA 94505. Some minor piping modifications will take place at Plant No. 1 in order to accommodate the work at Plant No. 2.

Improvements will take place in areas of existing pavement and areas previously graded for future process improvements. Process improvements include adding an oxidation ditch and three new anoxic chambers in front of the existing and new oxidations ditch at Plant 2. See Figure 1. The process changes will not result in an increase of capacity for the Wastewater Treatment Plants. Other improvements include replacing the screen at the headworks, piping and pumping system changes to support the new process, and other maintenance items. Construction activities will include excavation to 16 feet deep, paving and grading of approximately 1.5 acres, construction of new concrete structures, modification of existing concrete structures, Civil and mechanical piping and pumping systems, and electrical support systems. All storm water for the facility is collected and treated on site. Excavations will follow approved Storm Water Pollution Prevention Plan (SWPPP) control procedures. Construction dust control will follow standard guidelines. Construction crew size will normally vary between 5 to 10 people. There will be occasional truck deliveries of process equipment, rock, asphalt, rebar, and concrete. Total construction period is estimated to take 18 to 24 months.





**SURROUNDING LAND USE AND SETTING:** The land use to the North, South and East of Plant #1 are designated as A-3. The land use to the West of Plant #1 is a golf course with some residential. The land use around Plant #2 is designated as A-3.

**OTHER PUBLIC AGENCIES WHOES APPROVAL IS REQUIRED:** The California Regional Water Quality Control Board, Central Valley Region will be administering the National Pollution Discharge Elimination System (NPDES) permit changes for modifying the Treatment Plant process to reduce effluent total nitrogen below 10 mg/l as well as issuing a WDID number and monitoring the SWPPP for the project.

#### **CALIFORNIA NATIVE AMERICAN TRIBES**

The Lead Agency has sent letters to several tribes identified in Section XVII providing formal notification as required under AB 52 (Gatto, 2014) and is currently awaiting any formal requests for consultation.

#### **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

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

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agricultural and Forestry Resources | <input type="checkbox"/> Air Quality                  |
| <input type="checkbox"/> Biological Resources               | <input checked="" type="checkbox"/> Cultural Resources       | <input type="checkbox"/> Geology / Soils              |
| <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards & Hazardous Materials       | <input type="checkbox"/> Hydrology / Water Quality    |
| <input type="checkbox"/> Land Use / Planning                | <input type="checkbox"/> Mineral Resources                   | <input type="checkbox"/> Noise                        |
| <input type="checkbox"/> Population / Housing               | <input type="checkbox"/> Public Services                     | <input type="checkbox"/> Recreation                   |
| <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources           | <input type="checkbox"/> Utilities / Services Systems |
| <input type="checkbox"/> Mandatory Findings of Significance |  |   |

**DETERMINATION:** (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.



## EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS.</b>				
Except as provided in Public Resource Code Section 21009, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

**I Discussion:**  
(Sources 1 & 2)

**Item a)**

The project site is south and north of State Route 4, which is a designated scenic route by the Transportation Element of the Contra Costa County General Plan, and west of Old River. The existing Plant 2 facilities, and the undeveloped former agricultural land surrounding it, is set several feet below the level of State Route 4 and at least 300 feet from the highway. The Plant 2 site contains low buildings, open steel-beam superstructures and light standards surrounded by a chain-link fence. The surrounding agricultural fields are nearly level. No visual changes will occur at Plant #1.

Vistas are expansive in most directions with distant views of Mt. Diablo and its foothills to the west beyond the raised levees surrounding the project site. Immediate views on the north, south and west sides along the project

area vary from open agricultural fields, fences and power or telephone lines to common landscape trees and homes that are set back at various distances from State Route 4. Views to the east are limited by the Old River levee, but trees, power lines, the superstructure of the State Route 4 bridge across the river, and the existing Reclamation District 800 pumping station can be seen above the levee.

Neither existing distant nor immediate views would be affected by the proposed project because most of the elements would be at or below ground level or concealed by existing buildings. Consequently, the project would not have the potential to affect scenic views adversely in the State Route 4 scenic corridor, and impacts would be less than significant.

**Item b)**

The project site contains no scenic resources such as rock outcroppings, or historic buildings. No trees would be removed as part of the proposed project. Consequently, damage to scenic resources is not considered an impact of the project.

**Item c)**

The visual character of the existing wastewater treatment plant would not be significantly altered by the proposed project. Most of the area surrounding the project site has been designated for agriculture, recreation and infrastructure in the Contra Costa County General Plan Land Use Element. Consequently, adverse effects on the existing visual character of the project area are considered less than significant for the project.

**Item d)**

Security lighting is an integral part of the existing Plant 2 facilities. The lighting standards are mounted as low as is compatible with maintaining a secure site. Similar lighting standards would continue to be used at Plant 2 as part of the project, and therefore would not alter the lighting conditions. Because reflective materials would not be used in the construction of the new facilities, glare is not a significant impact and the proposed project would have a less-than significant effect on day or nighttime views in the area.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**II. AGRICULTURE AND FORESTRY RESOURCES.**

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

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?

X

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

X

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))?

X

d) Result in the loss of forest land or conversion of forest land to non-forest use?

X

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 us

X

**II Discussion:**

(Sources 2, 3, 4, & 5)

**Items a & b)**

The proposed project will occur on land that is identified as Public/Semi Public on the Contra Costa County General Plan Land Use Element Map and is consistent with the Land Use Element of the Contra Costa County General Plan. The project will be constructed within an existing wastewater treatment plant site that is completely fenced in and is not conducive to agricultural use. Although zoned for agricultural use, the project site has not been used for agriculture in decades and there are no Williamson Act lands in the project vicinity. Consequently, the proposed project's impact on existing zoning for agricultural use is less than significant.

**Items c-e)**

The project would not conflict with existing zoning for, or cause rezoning of farmland, timberland, or timberland zoned Timberland Production. The site does not contain forest land and there are no forestlands in the vicinity. The site is currently used as a wastewater treatment plant and would not result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**III. AIR QUALITY.**

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

a) Conflict with or obstruct implementation of the applicable air quality plan?			X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X
d) Expose sensitive receptors to substantial pollutant concentrations?			X
e) Create objectionable odors affecting a substantial number of people?			X

**III Discussion:**  
(Sources 5 & 9)

**Items a - e)**

Because the proposed project will not increase Plant capacity and it will result in older less efficient equipment being taken out of service at Plant #1 and replaced with newer more efficient equipment at Plant #2, it will have the net effect of improving Air Quality. Plant #1 is currently located a few hundred feet from residences and Plant #2 is located over 1,000 feet from residences. By relocating all Plant #1 processes to Plant #2, the Project will therefore result in improving Air Quality for nearby residents.

Short term construction particulate emissions will be less than significant since they will be controlled by the contractor utilizing standard construction dust control measures such as covering haul trucks, limiting traffic speeds to 15 mph, watering demolition activities and exposed areas, use of water sweepers, daily clean up of mud and dirt carried onto paved areas and following standard SWPPP best management practices.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**IV. BIOLOGICAL RESOURCES:**

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

X

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

**IV Discussion:**  
(sources 10 & 11)

**Item a)**

Construction for the project will take place in paved areas on the project site as well as areas that are mowed once or twice a year in an operating wastewater treatment plant with no trees or wetlands that will be in the vicinity of the work. The District’s wastewater engineer, Gregory Harris, recently stated that for the past 25 years he has never seen borrowing owls on the treatment plant site. The project would therefore have no impact on candidate, sensitive or special status species.

**Item b)**

There is no riparian habitat on the project site. Additionally, there are no sensitive vegetation communities within the project area. For these reasons, the proposed project will have no impact on these resources.

**Item c)**

There are no wetlands of any type where the work will be occurring. For that reason, the proposed project will have no impact on these resources.

**Item d)**

Since there are no waterways on the project site, the project will not interfere with any fish. The project site is completely fenced. The project will therefore not interfere with any migratory wildlife or impede the use of native wildlife nursery sites. For that reason, the proposed project will have no impact on these resources.

**Item e)**

There are no trees of any type in the project area. For that reason, the proposed project will have no impact on these resources or policies.

**Item f)**

A Habitat Conservation Plan (HCP) was prepared for eastern Contra Costa County to address preserving the rich landscape and rare species that reside in this area (East Contra Costa County Habitat Conservancy 2019). The nearest project designated for conservation to the Town of Discovery Bay is Kellogg Creek Basin, which is southwest of the town and approximately 2 miles west of the proposed project area. Therefore, the proposed project would not pose a threat to any HCP or a Natural Community Conservation Plan.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**V. CULTURAL RESOURCES.**

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

**V Discussion:**  
(Sources 5, & 6 )

**Item a)**

A review of records and literature on file at the Northwest Information Center indicates that the Town of Discovery Bay and its immediate environs contain no recorded Native American or historic-period archaeological resources listed with the Historical Resources Information System. Also, a file check with the Native American Heritage Commission in February of 2003, as part of the 2003 Plant Upgrade Project Revealed no sacred lands on or near the Treatment plant site.

Construction will be taking place in an area of previously disturbed ground and in paved areas on the project site as well as areas that are mowed once or twice a year in an operating wastewater treatment plant with no trees or wetlands that will be affected by the project. The project area was surveyed in 1991 for cultural resources and none were found. During construction of the plant upgrade in 2003 no cultural resources were found while excavating for the oxidation ditch, pipelines and other structures.

**Item b)**

Native American archaeological sites in this portion of Contra Costa County tend to be situated near alluvial flats, near ecotones, and near sources of fresh water including springs. Based on the knowledge of the prehistory and history of the region, it may be concluded that the site has low sensitivity for the presence of prehistoric archaeological sites because of its location in a flat valley with no fresh water sources. Agricultural activities on the project site would have disturbed such resources, if extant and located near the surface. The most sensitive portion of the project area was surveyed in 1991 for cultural resources: none were identified. Although unlikely to occur, it is not possible to determine the existence of buried archaeological resources on the project site without excavation. Project-related ground disturbance may indirectly affect previously unknown archaeological resources significant under Section 15064.5 of the CEQA Guidelines.

**PROPOSED MITIGATION MEASURES:** Implementation of the standard mitigation measures (Mitigation Measure CR-1), to be included as part of the proposed project, pursuant to Section 15064.5(f) of the CEQA Guidelines and Public Resources Code Section 21082 would reduce potential impacts to unknown archaeological resources to a less-than-significant level.

**Mitigation Measure CR-1. Cease Construction Work Upon the Discovery of Historic or Archaeological Resources: Evaluate Resources Before Continuing Construction.** If potential historic or archaeological resources are discovered during construction, suspend all work in the immediate vicinity (within approximately 50 feet) and avoid altering the materials and their context pending site investigation by a qualified archaeological or cultural resource consultant retained by the project sponsor. Construction work shall not commence again until the archaeological or cultural resources consultant has been given an opportunity to examine the findings, assess their significance, and offer proposals for any additional exploratory measures deemed necessary for the further evaluation of and/or mitigation of adverse impacts to any potential historical resources or unique archaeological resources that have been encountered.

If the find is determined to be an historic or unique archaeological resource, and if avoidance of the resource would not be feasible, the archaeological or cultural resources consultant shall prepare a plan for the methodical excavation of those portions of the site that would be adversely affected. The plan shall be designed to result in the extraction of sufficient volumes of non-redundant archaeological data to address important regional research considerations. The work shall be performed by the archaeological or cultural resources consultant and shall result in detailed technical reports. Such reports shall be deposited with Contra Costa County, the Town of Discovery Bay, and the California Historical Resources Regional Information Center. Construction in the vicinity of the find shall be accomplished in accordance with current professional standards and shall not recommence until this work is completed. The project sponsor shall assure that project personnel are informed that law prohibits collecting significant historical or unique archaeological resources discovered during development of the project. Prehistoric or Native American resources can include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources can include nails, bottles, or other items often found in refuse deposits.

**Item c)**

The surface of the site is a level alluvial plain similar to alluvial areas throughout the Sacramento-San Joaquin valley. Consequently, no unique geological features exist at or nearby to the project site. The alluvial deposits consist of material that has been reworked by the action of rivers in recent geologic history. Consequently, unique paleontological resources are unlikely to occur. As such, the project would have no impact on geologic or paleontological features.

**Item d)**

No human remains, including those interred outside of formal cemeteries, are known to exist at or near the project site. A file check with the Native American Heritage Commission revealed no sacred lands on or near the project alignment. Although unlikely to occur, it is not possible to determine the existence of buried human remains on the project site without excavation. Project related ground disturbance may indirectly affect previously unknown burials.

**PROPOSED MITIGATION MEASURES:** Implementation of the following standard mitigation measure (Mitigation Measure CR-2), to be included as part of the proposed project, pursuant to CEQA Section 15064.5(e) of and Health and Safety Code Section 7050.5 would reduce potential impacts to unknown burials to a less-than-significant level:

**Mitigation Measure CR-2.** Cease Work upon the Discovery of Human Remains: Evaluate Remains Before Continuing Construction.

In the event of discovery or recognition of any human remains on the project site, the contractor shall contact the Contra Costa County Coroner, pursuant to Section 7050.5(b) of the California Health and Safety Code. In this event, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner determines the origin of such remains. The coroner, upon recognizing the remains as being of Native American origin, shall contact the Native American Heritage Commission within 24 hours. No further disturbance of the site may be made except as authorized by the County coroner. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, including the designation of a Native American Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for “protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction.” To achieve this goal, construction personnel on the project shall be instructed as to both the potential for discovery of cultural or human remains, and the need for proper and timely reporting of such finds, and the consequences of failure to do so.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**VI. GEOLOGY AND SOILS.**

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

X

ii) Strong seismic ground shaking?

X

iii) Seismic-related ground failure, including liquefaction?

X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

**VI Discussion:**  
(Sources 5, & 6 )

**Item a: i )**

No known active faults are mapped within the project area and no faults mapped in an Alquist-Priolo Earthquake Fault Zone trend toward the site. The nearest State of California zoned, active faults are the Clayton-Marsh Creek-Greenville fault, about 13 miles southwest of the project area; the Pleasanton fault, about 19 miles southwest of the project area; the Green Valley-Concord fault, 23 miles west-northwest of the project area; and the Calaveras fault, 23 miles west-southwest of the project area. The Great Valley fault is mapped approximately 3.5 miles west of the project site. The Great Valley fault is considered a seismically active thrust fault, but because it does not extend to the ground surface, it is not in an Alquist-Priolo Earthquake Fault Zone. The Stockton fault is mapped approximately 9 miles east of the project site, where it is concealed by overlying sediments and is not in an Alquist-Priolo Earthquake Fault Zone.

Based on this information, surface rupture along an active fault is not considered a hazard associated with this project.

**Item a: ii )**

Because of the presence of active faults in the San Francisco Bay region, the Discovery Bay area is considered seismically active. An earthquake of moderate to high magnitude similar to those that have occurred would cause strong groundshaking in the project area (Modified Mercalli Intensity VII). The design earthquake for the project area is a Moment Magnitude (Mw) 6.9 earthquake on the Greenville fault. Higher magnitude earthquakes probably would occur along such major faults as the Hayward or San Andreas (35 and 52 miles west of the project site, respectively), but these would not cause more intense groundshaking than an Mw 6.9 earthquake on the Greenville fault. Based on historical evidence, it is probable that at least one such earthquake will occur during the life of the proposed facility. The proposed project would include structural elements that meet current building code requirements and as such would reduce potential impacts caused by ground shaking to a less than significant level.

**Item a: iii )**

Soil conditions in the area generally are of a fine-grained nature and composed of clay, silt, fine grained sand and organic material. These areas may be subject to liquefaction during a seismic event if perched groundwater conditions are present. The water table in the project vicinity generally is less than 5 feet below the ground surface, and can be as little as 18 inches below the ground surface where particularly clayey soils occur. The United States Geological Survey classifies the liquefaction susceptibility of the project area as high. Pursuant to the California Building Code (CBC), a site-specific analysis must be prepared by a registered engineer specializing in geotechnical assessments for sites lying in potential liquefaction areas (known as soil type SF). Type SF soils include highly expansive soils (Ref: CBC, Chapter 16, Division V – Soil Profile Types (Section 1636, 1997).

Consequently, the CBC requirements would reduce any potentially significant liquefaction or expansive soil impacts to less-than-significant levels.

**Item a: iv )**

The project area is nearly flat, sloping gently east, southeast, and south from about 8 feet below mean sea level to about 10 feet below mean sea level. The only substantial slopes adjacent to the site are the backslopes of the levees, which are constructed of compacted soil materials at gradients between 3:1 and 5:1, and, therefore, are very stable. Because the area is so nearly level and is not adjacent to unstable slopes, impacts from landslides at the project site are negligible.

Based on this information, landsliding is not considered an impact associated with this project.

**Item b)**

Portions of the project site would be trenched for pipelines and excavated for the new oxidation ditch and the anoxic basins. The surface material at the site consists of as much as 5 feet of naturally occurring peat and muck (the Kingile muck). Beneath the peat is unconsolidated, moderately to poorly sorted silt and clay, rich in organic material (probably the Egbert mucky clay loam). In their natural condition, the soils are expansive, but are not especially erosion-prone from flowing water because of their nearly level surface. They are moderately sensitive to wind erosion if tilled or otherwise exposed to drying. Erosion control and loss of topsoil would be controlled through the BMPs that would be specified in the SWPPP resulting in less than significant soil erosion or loss of

topsoil. The contractor for the project will be required to comply with the Construction General Permit and submit an NOI to the Water Board SMARTS website as well as a SWPPP for the project and meet all relate compliance requirements.

**Item c)**

The project would not involve permanent withdrawal of groundwater, oil, or natural gas from beneath the site. Therefore, the project would not contribute to regional subsidence. Structures on the site would have foundation designs incorporating the recommendations of existing site-specific geotechnical studies to reduce potential damage from settlement or lateral spreading to an acceptable level. See Section VI. a) iv) regarding land sliding not being considered an impact associated with this project. See Section VI. a) iii), regarding the potential for liquefaction being reduced to a less than significant level through the strict enforcement of building standards by the Town of Discovery Bay.

Based on this information, landslide, lateral spreading, subsidence, liquefaction or collapse are not considered significant impacts associated with this project.

**Item d)**

The soils at the project site have high expansion potential, either at the ground surface or within a few feet below the ground surface. These soils shrink and swell with moisture changes (the critical characteristics of expansive soil) sufficiently to damage pavements, slabs-on-grade, and structures supported on shallow foundations. Structures on the site would have foundation designs incorporating the recommendations of existing site-specific geotechnical studies to reduce potential damage from expansive soils to an acceptable level. See Section VI. a) iii), regarding the potential for damage caused by expansive soils being reduced to a less than significant level through the strict enforcement of building standards by the Town of Discovery Bay.

**Item e)**

The proposed project does not include septic tanks or on-site disposal of wastewater. Consequently, the capacity of the soils on the project site to support septic systems is not pertinent and is therefore not an impact.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**VII. GREENHOUSE GAS EMISSIONS.**

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

X

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

X

**VII Discussion:**  
(Sources 7, 8, 9 & 12)

**Items a & b )**

There are no process at the WWTP that produce methane or release NOX to the atmosphere.

The new treatment process will remove NOX from the wastewater and convert it to N<sub>2</sub> prior to releasing it into the atmosphere. N<sub>2</sub> is not a greenhouse gas.

The existing and new process uses aerobic biological treatment. There is normal aspiration of the biology that will release CO<sub>2</sub>. The amount of CO<sub>2</sub> released to the atmosphere is directly proportional to the biological oxygen demand in the wastewater as it is this demand that supports the growth of the biology. The biological oxygen demand after the project will match the current biological oxygen demand prior to the project. Therefore there should be no increase in CO<sub>2</sub> emissions from the process after the project.

The total increase in power demand as a result of the project is 44 hp over a 24 hour period which is equivalent to 787 kWh per day of energy consumption (44 x 24 x 0.7457).

Per the EPA GHG conversion website, this equates to 203 metric tons of GHG per year. Per the May 2010 BAAQMD Air Quality Guidelines, this is below the Threshold of Significance for stationary-source projects of 10,000 metric tons per year and would not conflict with a plan or policy of reducing GHG emissions since the increase of GHG emissions are less than the threshold of significance.

The California Air Resources Board (CARB) AB 32 Scoping Plan (updated May 2014) had several measures to reduce emissions from transportation fuels, which would indirectly reduce emissions from construction equipment. These include the Low Carbon Fuel Standard (LCFS), which became effective on January 12, 2010, which would reduce GHG emissions by reducing the full fuel- cycle carbon intensity of transportation fuels used in California.

The various plans, policies, and regulations at the state and local level do not directly require the reduction of GHG emissions from construction equipment; however, emissions will be indirectly reduced through programs like the LCFS and engine retrofits. Several rules adopted to reduce emissions of non-GHG, such as CARB's In-Use Off-Road Diesel Vehicle Regulation (13 CCR 2449), could also reduce GHG emissions as a co-benefit. The Town recently contracted with Advisian in order to determine the GHG emissions during construction.

The GHG emissions during construction phase was quantified using CalEEMod Model Version 2016.3.2. The CalEEMod program uses the EMFAC2014 computer program to calculate the emission rates specific for Contra Costa County for employee, vendor and haul truck vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy construction equipment operations. The project characteristics in the CalEEMod were set to a project location of Contra Costa County, a Climate Zone of 4, and an operating year of 2023.

The proposed construction activities would occur in four phases. Phase 1 of the proposed Project involves grading the site properly for the use by following phase; Phase 2 involves excavating to 16 feet deep and construction of a new oxidation ditch and three new anoxic chambers; Phase 3 involves paving the site after the construction; Phase 4 involves piping and pumping system changes as well as rotor and screen replacing. All construction operation would occur Monday through Friday between 6 am to 3 pm or 7 am to 4 pm depending on the time of the year.

The estimated construction duration is 24 months beginning June 1, 2021. Table 1 shows the construction schedule for each phase.

**Table 1 Anticipated Construction Schedule (total 24 months)**

Construction Activity	Construction Phases	Construction Period			
		Start	End	Days/Week	Number of Working Days
Site Preparation & Grading	Grading	1-Jun-21	30-Sep-21	5	88
Addition of a New Oxidation Ditch and Three New Anoxic Chambers	Building (Structure) Construction	1-Oct-21	12-May-23	5	421
Paving	Paving	15-May-23	26-May-23	5	10
Piping, Pumping System Changes, Rotor and Screen Replacing	Demolition	1-Jun-21	12-May-23	5	509

The off-road construction equipment to be used in each phase is summarized in Table 2.

**Table 2 Construction Equipment Mix**

Construction Activity	Equipment	In CalEEMod	Number	HP	Load Factor	Hours Per Day	Note
Site Preparation and Grading (~ 4 month)	Skip Loader	Tractors/Loaders/Backhoes	1	97	0.37	7	Default in the model
	Front End Loader (4 yard bucket)	Rubber Tired Loader	1	203	0.36	8	Default in the model

heavy earth work)	Excavator (2 yard bucket)	Excavator	1	208	0.38	8	(Hitachi ex300 series provided by Client)
	Dozer	Rubber Tired Dozer	1	138	0.4	6	(Caterpillar D6M 138 provided by Client)
	Road Scraper	Scrapers	2	367	0.48	6	Default in the model
	Dump truck	Off-Highway Trucks	2	402	0.38	8	Default in the model
Addition of a New Oxidation Ditch and Three New Anoxic Chambers (~ 20.5 months)	Front End Loader (4 yard bucket)	Rubber Tired Loader	1	203	0.36	6	Default in the model
	Excavator (2 yard bucket)	Excavator	1	208	0.38	8	(Hitachi ex300 series provided by Client)
	Dump truck	Off-Highway Truck	1	402	0.38	8	Default in the model
	Pumper truck	Off-Highway Truck	1	402	0.38	8	Default in the model
Paving (~ 2 weeks)	Skip Loader	Tractors/Loaders/Backhoes	1	97	0.37	8	Default in the model
	Front End Loader (4 yard bucket)	Rubber Tired Loader	1	203	0.36	8	Default in the model
	Excavator (2 yard bucket)		1	208	0.38	8	(Hitachi ex300 series provided by Client)
	Road Scraper	Scrapers	2	367	0.48	8	Default in the model
	Dump truck	Off-Highway Trucks	1	402	0.38	6	Default in the model
Piping, Pumping System Changes, Rotor and Screen Replacing (~ 23.5 months)	Boom Lift	Other Material Handling Equipment	1	168	0.40	1	Default in the model

A summary of the GHG emissions from the model run is shown below in Table 3. The highest annual greenhouse gas emissions associated with construction is 529.20 metric tons per year, which will occur in 2022. Since the GHG emissions associated with construction-related activities are far below the most commonly used threshold of 10,000 metric tons per year, GHG emissions are therefore less than significant.

**Table 3 Project Construction-Related Greenhouse Gas Annual Emissions**

Air Pollutant	Estimated Emissions (metric tons/year)								
	2021			2022			2023		
	CO <sub>2</sub>	CH <sub>4</sub>	Total	CO <sub>2</sub>	CH <sub>4</sub>	Total	CO <sub>2</sub>	CH <sub>4</sub>	Total
Off-Road Construction Equipment	379.38	0.12	N/A	441.10	0.14	N/A	186.05	0.06	N/A
On-Road Vehicles	28.65	0.00	N/A	84.46	0.00	N/A	30.28	0.00	N/A
Total	408.02	0.12	N/A	525.55	0.15	N/A	216.33	0.06	N/A
Global Warming Potential	1.00	25.00	N/A	1.00	25.00	N/A	1.00	25.00	N/A
CO <sub>2</sub> e Emissions	408.02	3.09	<b>411.12</b>	525.55	3.64	<b>529.20</b>	216.33	1.53	<b>217.86</b>

Since the construction equipment will operate in compliance with all applicable regulations for off-road equipment, the proposed project will not conflict with any plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, there would be a less than significant impact.

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

**VIII. HAZARDS AND HAZARDOUS MATERIALS.**

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? X
  
- 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? X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
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?				X
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?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
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?				X

**VIII Discussion:**  
(Sources 5 & 10)

**Items a - d )**

The proposed project is not anticipated to transport, use or dispose of any hazardous materials, accidentally release hazardous materials, substance or waste, emit or handle hazardous waste within one- quarter mile of an existing or proposed school or be located on a site listed as a hazardous material site.

**Items e & f)**

The project is not within two miles of a public airport, public use airport or private air strip. The closest airport is Byron Airport, located approximately 10 miles to the northwest.

**Item g)**

The proposed project does not expand wastewater treatment capacity; therefore no impact is expected.

**Item h)**

The site and vicinity are not designated as “wildlands” in the current General Plan. The exposure of people or structures to a significant risk from wildland fires is not considered an impact associated with this project.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**IX. HYDROLOGY AND WATER QUALITY.**

Would the project:

a) Violate any water quality standards or waste discharge requirements?

X

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses or which permits have been granted)?

X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				X
f) Otherwise substantially degrade water quality?				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	
j) Inundation by seiche, tsunami, or mudflow?				x

**IX Discussion:**

(Source 5)

**Item a )**

During construction the contractor will be required to comply with standard RWQCB Storm Water Pollution Prevention Plan (SWPPP) requirements. Best management practices will be installed to prevent pollutants from entering stormwater which is contained on site. The wastewater plant's discharge will be improved as a result of the project by reducing nitrogen levels in the wastewater.

**Items b – f )**

The project does not involve groundwater extraction and will therefore not deplete groundwater supplies or interfere with groundwater recharge. The project will not alter existing drainage patterns of the site or area. All drainage is contained on site. The project will not contribute run off water which would exceed the capacity of the plant's on site stormwater drainage system. No degradation in discharge water quality will occur. Discharge water quality will actually improve due to the reduction of Nitrogen in the discharge water.

**Item g )**

The project does not include housing.

**Item h )**

The project is in a 500-year flood zone as established by FEMA therefore structures will not be placed in a 100-year flood hazard area.

**Item i )**

FEMA considers the levees adequate protection from flooding and has classified the site as being in the 500-year flood zone. It is highly unlikely that such a failure of the Old River levee would occur without warning and the risk is considered extremely low. Therefore exposure to flood hazards is not considered a significant impact for the project.

**Item j )**

Old River is the closest major water body to the site, which the proposed project lies within. The river is about 160-yards wide, 10 to 20-feet deep, and contained by levees that rise to about 13 feet above mean sea level, at the point where it passes the project area, and 51 miles upstream from Carquinez Bridge. At this point, the river is too far inland, with channels that are too narrow and too sinuous to be affected substantially by a tsunami to enter the Golden Gate. The amount of water stored between the Old River levee at any given time would be sufficient to allow the generation of a seiche during a major earthquake (Mw 7.0 to 8.0). Such an earthquake is unlikely to affect the area, because the closest earthquake fault to the site (the Greenville fault) does not appear capable of producing a great earthquake, and the groundshaking even from a great earthquake (Mw 8.0 and higher) on the more distant Hayward and San Andreas faults would not be as intense as from the design earthquake on the Greenville fault. The natural terrain adjacent to the project on the site is flat, and the levees are constructed of compacted material of a

size, range and density to withstand flowing when wet: there is very little risk of mudflow at the project site. Based on this information, seiche, tsunami or mudflow hazards are not considered impacts associated with this project.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**X. LAND USE AND PLANNING.**

Would the project:

- |   |  |   |   |
|---|--|---|---|
| a) Physically divide an established community?  |  |   | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? |  |   | X |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan?   |  | X |   |

**X Discussion:**  
(Sources 4, 5 & 11)

**Item a )**

The project will occur within an existing wastewater treatment plant site and will therefore not physically divide an established community.

**Item b)**

In accordance with the Contra Costa County Land Use Element Map, the site is designated for Public/Semi-Public use which is applicable to the wastewater treatment plant. In accordance with Government Code Section 53091 (d) & (e) wastewater treatment plant facilities and the collection system are exempt from land use permit or building permit requirements. Therefore, the proposed project would not conflict with any applicable land use plan, policy or regulation.

**Item c)**

A Habitat Conservation Plan (HCP) was prepared for eastern Contra Costa County to address preserving the rich landscape and rare species that reside in this area (East Contra Costa County Habitat Conservancy 2019). The nearest project designated for conservation to the Town of Discovery Bay is Kellogg Creek Basin, which is southwest of the town and approximately 2 miles west of the proposed project area. Therefore, the proposed project would not pose a threat to any HCP or a Natural Community Conservation Plan.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XI. MINERAL RESOURCES.**

Would the project:

- |   |  |  |   |
|---|--|--|---|
| 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?                                |  |  | X |
| 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? |  |  | X |

**XI Discussion:**

(Source 5)

**Items a & b)**

The project area is classified by the California Division of Mines and Geology as MRZ-1, a Mineral Resource Zone for which there is adequate information to indicate there are no aggregate mineral resources present. The closest known mineral aggregate resource is an outcrop of Domingue Sandstone about 4 miles southwest of the site. According to the California Department of Conservation, Division of Oil, Gas and Geothermal Resources, the project vicinity is not a recognized methane problem area. The closest known oil or gas resource is the Brent Oil and Gas Field 10 miles west of the site. Completion and operation of the plant would not involve quarrying, mining, or extraction of any known regionally or locally important mineral, oil, or gas resources on site, nor would it deplete any nonrenewable natural resource. Consequently, there would be no impact on mineral resources.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XII. NOISE.**

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

X

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

X

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

X

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

X

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

X

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

X

## **XII Discussion:**

(Sources )

### **Items a & c & d )**

The project is expected to last 18 – 24 months with all but a few days of work occurring at Plant 2 where there are no nearby sensitive receptors present. The Plant 2 site is bounded by agricultural lands to the south and west, State Route 4 to the north, and Old River to the east, none of which are sensitive receptors. There are sensitive receptors (residences) within the existing Discovery Bay community; however, the community is separated from the construction at Plant 2 and Plant 1 by a sound barrier north of State Route 4.

Ninety-eight percent of the construction activities will occur at Plant 2 which is at least 900 feet away from any residences, and Plant 2 is at least 5 feet lower than highway 4 with an 8 feet high soil Berm on the entire north side, all of which provides additional noise buffering. During the construction period daytime noise levels at Plant 2 could increase over the existing levels for an 18 -24 month period but would only occur 7:30 AM to 4:30 AM Monday through Friday with some Saturday work but would return to existing levels after 4:30 PM and after the completion of construction. Given the proximity of Plant 2 to the existing residences, it is not expected that these residences will experience any increase in noise levels as a result of the work at Plant 2 during the 18 -24 month period. The few days of construction that will be occurring at Plant 1 as part of the project is expected to generate less than significant noise levels no louder than routine maintenance that would occur at the Plant or during times that the Plant has been in full operation. In recognition of these anticipated noise levels, Plant 1 was originally built with a sound wall in order to attenuate the noise levels for the nearby residences to acceptable levels. Because of these existing sound walls and the proximity of 98% of the work being 900 feet from the residences, the project would not create a significant increase in ambient noise levels in the project vicinity and would be in compliance with any State, Local or Federal standards.

### **Item b)**

Pile driving will be limited to the Plant 2 site which is 900 feet away from any residence. Activities associated with the movement of heavy-duty trucks and similar construction equipment would occur on a temporary basis. Consequently, ground borne noise or vibration impacts would be considered less than significant.

### **Items e & f)**

The project site is not located within an airport land use plan or within two miles of a public airport. Consequently, airport-related noise impacts do not apply at this project site. Also see XII a, above.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XIII. POPULATION AND HOUSING.**

Would the project:

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)?

X

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

X

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

X

**XIII Discussion:**

(Source 5)

**Item a)**

The completion of this project does not represent an expansion of capacity or otherwise considered a growth project. The project is to improve and introduce plant process to reduce effluent nitrogen levels to 10 mg/l. The current project and proposed project do not include new housing, new businesses, or new infrastructure other than for the already permitted and approved usage and facility. Therefore, the proposed project would not promote growth beyond the limits of the approved General Plan and would have no impact on population and housing.

**Items b &c)**

The proposed project would not displace any existing housing or people as there is no housing on the project site.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XIV. PUBLIC SERVICES.**

<p>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:</p> <p>Fire protection?</p> <p>Police protection?</p> <p>Schools?</p> <p>Parks?</p> <p>Other public facilities?</p>	<p>X</p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p> <p></p>
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**XIV Discussion:**  
(Sources )

**Fire Protection.**

The proposed project would be constructed primarily of concrete and steel, most of the facilities would be below ground or open-air, and none of the structures would be used for human occupancy. The material treated by the wastewater treatment plant would not be flammable, no volatile chemicals would be used in treatment, and power would be provided by electricity rather than fossil fuels stored on-site. Consequently, the proposed project would not pose any special fire-fighting challenges and would not necessitate additional fire protection services.

**Police Protection.**

Because no unusual law enforcement problems are associated with the completion of the improvements, the proposed project would not necessitate additional police protection at the project site.

**Schools**

The proposed project is a wastewater treatment plant improvement project and does not involve residential uses. Consequently, the proposed project is not anticipated to result in new demand for schools.

**Parks.**

The demand for parks is directly linked to the residential population in Discovery Bay. The proposed project does not involve any parks and does not include new residential uses and, consequently, would not create a direct demand for parks.

**Other public facilities.**

Because the proposed project does not include residential uses, and does not increase plant capacity it would not create direct demands for other public services such as water facilities, libraries and recreational centers.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XV. RECREATION.**

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?

X

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?

X

**XV Discussion:**

(Source 5)

**Items a & b)**

The project does not include recreational facilities or residential housing that would generate an increase on existing neighborhood or regional parks.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XVI. TRANSPORTATION/TRAFFIC.**

Would the project:

- |   |  |  |  |   |
|---|--|--|--|---|
| 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? |  |  |  | X |
| 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?  |  |  |  | X |
| 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?   |  |  |  | X |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?  |  |  |  | X |
| e) Result in inadequate emergency access?   |  |  |  | X |
| 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?  |  |  |  | X |

**XVI Discussion:**  
(Sources 5 &10)

**Items a & b )**

During the construction phase of the project, additional vehicle movement and need for parking related to the project would be limited to transportation of workers, equipment, and material to and from the project site. It is anticipated that 5 to 10 people per day would need to be on the project site under ordinary circumstances. All personal vehicles, excavation and construction equipment would be left in designated parking and staging areas on the site, well off Highway 4. Even if a larger crew were needed at any time during the construction of the proposed project, there is adequate parking space on the site for extra vehicles.

Excavation and construction equipment would be driven onto the project site and would remain there until their tasks were completed, thus eliminating the need to move the equipment on and off the site more than once. None of these situations would add a statistically significant amount of traffic to Highway 4. Therefore, the proposed project would have no significant effect on traffic load or street capacity in the vicinity of the site or in the region.

**Item c)**

The proposed project is not near any air travel facility. The project does not include the construction of above-ground facilities that would be high enough to interfere with air travel.

**Item d)**

The proposed project would not alter any publicly traveled roads and would not increase transportation design hazards.

**Item e)**

There are no road closures associated with this project so there would not be an impact on emergency access.

**Item f)**

The proposed project would 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 because the project does not involve any permanent surface level alteration that would interfere with any mode of transportation.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XVII. TRIBAL CULTURAL RESOURCES.**

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- |   |          |
|---|----------|
| <p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>   | <p>X</p> |
| <p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <p>X</p> |

**XVII Discussion:**  
(Sources 5 & 13 )

**Items a & b )**

A review of records and literature on file at the Northwest Information Center indicates that the Town of Discovery Bay and its immediate environs contain no recorded Native American or historic-period archaeological resources listed with the Historical Resources Information System. Also, a file check with the Native American Heritage Commission in February of 2003, as part of the 2003 Plant Upgrade Project Revealed no sacred lands on or near the Treatment plant site.

Construction will be taking place in an area of previously disturbed ground and in paved areas on the project site as well as areas that are mowed once or twice a year in an operating wastewater treatment plant with no trees or wetlands that will be affected by the project. The project area was surveyed in 1991 for cultural resources and none were found. During construction of the plant upgrade in 2003 no cultural resources were found while excavating for the oxidation ditch, pipelines and other structures.

In accordance with AB 52 (Gatto 2014), letters were sent to the following tribes notifying them of the proposed project on February 25 and 26, 2021. As of March 8, 2021, none the tribes had requested consultation:

1. Amah Mutsun Tribal Band of Mission San Juan Bautista
2. Indian Canyon Mutsun Band of Costanoan.
3. Muwekma Ohlno Indian Tribe of the SF Bay Area.
4. North Valley Yokuts Tribe.
5. The Ohlone Indian Tribe.
6. Wilton Rancheria.
7. Tule River Indian Tribe
8. Confederated Villages of Lisjan

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XVIII. UTILITIES AND SERVICE SYSTEMS.**

Would the project:

- |  |  |  |   |
|--|--|--|---|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  |  |  | X |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? |  |  | X |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?          |  |  | X |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?   |  |  | X |

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

**XVIII Discussion:**

(Source 5)

**Item a)**

The project would not cause the exceedance of the Regional Water Quality Control Board requirements. The project is being constructed in order to meet the new nitrogen discharge permit requirements.

**Item b)**

The improvements being constructed will not expand treatment plant capacity and will not cause significant environmental effects.

**Item c)**

The project would utilize and extend the existing storm drain collection system on-site. There would be no construction of new storm drain facilities off-site.

**Item d)**

The project will not require an expansion of water supply entitlements or water supply requirements.

**Item e)**

The proposed project is for improvements at the existing plants and will not place additional demand on the plants.

**Item f)**

The proposed project would not produce any solid waste in excess of what is currently being disposed of by the existing treatment plants because the completion of the facilities would not change the treatment capacity.

**Item g)**

As discussed above in Section XVI. f) above, the existing wastewater treatment plants already receives solid waste disposal services which comply with federal, State, and local statues and regulations related to solid waste.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XIX. MANDATORY FINDINGS OF SIGNIFICANCE.**

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

X

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

X

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

X

## **XIX Discussion:**

### **Item a)**

Impacts to the natural environment from the proposed Project are limited, and impacts which could potentially be significant will be mitigated as provided for herein; additional controls and standards of the SWRCB and the BAAQMD govern the Project and will be enforced. Project impacts will therefore, as mitigated, be less-than-significant.

### **Item b)**

No; The proposed project will provide a benefit by reducing the levels of nitrogen in the effluent water down to 10 mg/l and as described throughout the Evaluation of Environmental Effects, potential impacts related to these resources would either be less than significant or less than significant with the implementation of appropriate mitigation measures and compliance with applicable building codes and proper engineering design of the project. There would be no long-term, operations-related significant impacts to any resource areas analyzed in this initial study. Given the limited extent and duration of potential impacts resulting from construction and operations of the proposed project, as described, the proposed project's contribution to potentially cumulatively considerable significant impacts from past, present and reasonably foreseeable projects would be less than significant.

### **Item c)**

The project does not have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.

## SOURCES

Information used in the preparation of this document was gathered from the following documents:

<u>Reference No.</u>	<u>Description</u>
1	Scenic Highway Map, Contra Costa County Transportation and Circulation element to the Contra Costa County General Plan, Page 5-25 <a href="https://www.contracosta.ca.gov/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=">https://www.contracosta.ca.gov/DocumentCenter/View/30915/Ch5-Transportation-and-Circulation-Element?bidId=</a>
2	California Department of Conservation website California Important Farmland Finder <a href="https://maps.conservation.ca.gov/DLRP/CIFF/">https://maps.conservation.ca.gov/DLRP/CIFF/</a>
3	Zoning Layer from Contra Costa County CCMAP <a href="https://ccmap.cccounty.us/Html5/index.html?viewer=CCMAP">https://ccmap.cccounty.us/Html5/index.html?viewer=CCMAP</a>
4	Contra Costa County General Plan Land Use Map with amendments through December 1, 2020. <a href="https://www.contracosta.ca.gov/DocumentCenter/View/30949/Land-Use-Element-Map?bidId=">https://www.contracosta.ca.gov/DocumentCenter/View/30949/Land-Use-Element-Map?bidId=</a>
5	Discovery Bay Wastewater Treatment Plant Upgrade Project, Mitigate Negative Declaration, September 3, 2003, SCH # 2003072160.
6	HERWIT, Gregory Harris email 12.10.2020 indicating that no Native American prehistoric archaeological sites were discovered during the Plant 2 upgrade in 2003.
7	HERWIT, Gregory Harris email 2-12-2021 Green House Gas Emissions as a result of project.
8	EPA website to calculate GHG as a result of energy use. <a href="https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator">https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</a>
9	BAAQMD Air Quality Guidelines May, 2010 <a href="https://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/draft_baaqmd_ceqa_guidelines_may_2010_final.pdf">https://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/draft_baaqmd_ceqa_guidelines_may_2010_final.pdf</a>
10	Contra Costa County General Plan. <a href="https://www.contracosta.ca.gov/4732/General-Plan">https://www.contracosta.ca.gov/4732/General-Plan</a>
11	Eastern Contra Costa County Habitat Conservation Plan. <a href="https://www.contracosta.ca.gov/depart/cd/water/HCP/index.html">https://www.contracosta.ca.gov/depart/cd/water/HCP/index.html</a>
12	Advisian, Sheila Chang email report 3-5-2021, providing construction phase Green House Gas emissions modeling results.
13	Consultation letters sent to the tribes listed in Section XVII.