Final Mitigated Negative Declaration for the San Elijo Water Reclamation Facility Upgrades

APRIL 2016

PREPARED FOR:

San Elijo Joint Powers Authority
2695 Manchester Avenue
Cardiff By The Sea, California 92007

Contact: Mike Konicke

PREPARED BY:

DUDEK
605 Third Street
Encinitas, CA 92024

~~PUBLIC REVIEW DRAFT~~FINAL

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Mitigated Negative Declaration

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~~FEBRUARY~~ APRIL 2016

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1 INTRODUCTION

1.1 Project Description and Overview

1.1.1 Purpose and Need

In April 2015, San Elijo Joint Powers Authority (SEJPA) completed the 2015 Facility Plan for the SEJPA's San Elijo Water Reclamation Facility (SEWRF). The purpose of the 2015 Facility Plan was to provide a planning document that would identify and prioritize potential improvements at the SEWRF. The 2015 Facility Plan recommends that multiple components of the SEWRF be upgraded or replaced based on a combination of factors such as risk, safety, physical condition, code compliance, potential for improving process efficiency, reducing labor, and improving energy efficiency.

SEJPA is pursuing State Revolving Loan Fund (SRF) support from the State Water Resources Control Board (SWRCB) for portions of the identified upgrades in the 2015 Facility Plan. Select portions of the SEWRF upgrades that would be funded through SRF support constitute the proposed project under the California Environmental Quality Act (CEQA). This project would be included in the SWRCB's "CEQA Plus" Environmental Package along with a separate San Elijo Water Reclamation Facility Land Outfall Replacement Project.

1.1.2 Project Location and Setting

All facility upgrades would occur within the existing SEWRF site (project site) approximately 16.7 acres and located at 2695 Manchester Avenue, Cardiff by the Sea, California 92007 (Assessor's Parcel Number 2610101302), as shown in Figure 1, Regional Map, and Figure 2, Vicinity Map. The project site is surrounded by existing residential development to the north, west, and southeast. Interstate 5 (I-5) is located immediately to the east of the project site. San Elijo Lagoon is located to the south across Manchester Avenue. The project site is located approximately 0.4 mile east of the Pacific Ocean.

Currently, the project site is fully developed as the existing SEWRF, associated landscaping, and stormwater drainage facilities, as shown in Figure 3, Project Site. The existing facilities within the SEWRF are shown in Figure 4, Existing Site Plan. The existing facilities are separated from surrounding development by extensive existing landscape that consists of shrubs and trees. The project site is zoned as Public/Semi-Public. The project is within the Coastal Zone.

1.1.3 Proposed Project Components

1.1.3.1 Water Reclamation Facility Upgrades

The following is a summary of the proposed SEWRF upgrades, rehabilitations, and replacements as recommended by the 2015 Facility Plan, in the general order of implementation. Refer to Figure 5, Proposed Project Components, for a layout of the project site and the location of project components, as described below.

Administration and Operations Buildings and Seismic Upgrades. The operations building, cogeneration building, and chlorine building would receive a seismic roof to wall connections retrofit. A new administration building would be constructed at the southern end of the project site, near the SEWRF entrance off Manchester Avenue. The proposed administration building would be located approximately 250 feet from the southern property line and approximately 85 feet from the western property line. The proposed administration building would be approximately 12,500 square feet and 30 feet in height (two stories), with associated parking lot with lighting and landscaping. The current design and location is conceptual and subject to change. Although the design would be finalized at a later date, building material would likely consist of concrete masonry and exterior finishes would be similar to existing structures within the SEWRF. The building would include a mechanical heating, ventilation, and air conditioning system. Depth of excavation for the building would be approximately 5 to 10 feet.

Site Improvements and Security. Site access and use would be improved by replacing the open storm channels with storm pipes or culverts. Work on the open storm channel would extend approximately 10 feet west of the existing channel. This area of work is within the 20 foot fire management zone that is cleared periodically, as required by the City of Encinitas Fire Department. Additionally, this area had previously been developed for underground pipelines that exist today. Site asphalt would be replaced. Fencing surrounding the SEWRF site would be improved for proper height along with the installation of climbing deterrents (also to be installed at the block wall located at the gate). Video surveillance would be improved at critical facility areas.

Preliminary Treatment Upgrades. Two existing mechanical screens would be replaced with new screens in new concrete channels, duty/standby compactors, and a new screenings conveyor/sluice would be installed. New screenings and grit inlet channels would be constructed. Corrosion in the existing screenings channels, grit chamber and channels, and primary influent channels would be repaired. Additional foul air ducting would be installed at the headworks channels and Grit and Screenings Building to improve odor control.

Electrical Upgrades. Switchboard MS-2 in the cogeneration building and the odor control panel in the headworks would be replaced. As part of the electrical upgrades, the Arc Flash Study would be updated and Arc Flash labels included on all electrical panels.

Dewatering Upgrades. These upgrades would include replacement of the existing belt filter presses, feed pumps, and electrical equipment and controls. The condition of the truck loading hopper would be evaluated, and the hopper would be repaired or retrofitted as necessary. The mezzanine and roof decking in the dewatering building would be repaired.

Digester Improvements. Digester improvements would include replacement of Sludge Circulation Pumps Nos. 2 , 3, and 5, heat exchangers, and the floating cover on Digester No. 2. Repair would occur on Digester No. 2 (concrete and lining), and Digester No. 3 (seals around cover), Digester No. 4 (joint between cover and walls). Additionally, further inspection of cracks on Digesters Nos. 2, 3, and 4 may require further repair.

Aeration and Return Upgrades. These upgrades would include the installation of mixing in anoxic zones, high efficiency blowers, diffusers, permanent baffles, a fall arrest system, and Return Flow Pump No. 4. The drain pump, all discharge piping, and all pump rails would be replaced.

Dissolved Air Flotation (DAF) Upgrades and Co-thickening. Three pumps and the DAF No. 2 Drive would be replaced and a Pressurization Pump No. 2 (for DAF No. 2) would be installed. These upgrades would implement co-thickening of waste activated sludge and primary sludge.

Supervisory Control and Data Acquisition (SCADA) System. SCADA system hardware would be installed and the software would be updated. This upgrade would include transitioning to a single platform, adding missing equipment (alarms, signals, etc.), and updating the control room working station.

Solar Fields. The proposed project includes four proposed solar fields. The locations of the solar fields align with the identified areas shown on Figure 5. The solar component of the proposed project is conceptual and is subject to change upon final design. Conceptual plans for solar fields include an approximate 80-panel carport on the west of the generator, an approximate 300-panel ground-mounted field east of the generator, an approximate 200-panel carport west of the existing headworks, and an approximate 230-panel ground-mounted field north of the proposed 200-panel carport.

1.1.3.2 Construction

Project construction would be phased intermittently over several years beginning in January 2017 and ending in September 2019. Water required for construction would be supplied by on-site recycled water.

Equipment would vary greatly between project components, and construction of the new administration building would require the largest construction equipment. The following is potential equipment required for construction of the proposed project:

- Medium-sized excavation and earth moving equipment
- Dump trucks
- Cement mixers
- Portable welders
- Cranes

1.1.3.3 Operations and Maintenance

The overall function and purpose of the SEWRF would remain unchanged with implementation of the proposed project. The proposed project would improve the safety and efficiency of the SEWRF, improving its reliability. Regular maintenance activities within the SEWRF would continue generally unchanged from existing conditions. The capacity and number of operational staff would not change as a result of the proposed project.

1.1.4 Discretionary Actions

The following discretionary actions are required for the proposed project:

- San Elijo Joint Powers Authority Board of Directors approval and adoption of the MND
- State Water Resources Control Board approval and CEQA plus approval:
    - In addition to standard CEQA compliance, SEJPA has the potential to apply for the SRF Loan Program, which is partially funded by the U.S. Environmental Protection Agency (USEPA). This makes the project subject to federal environmental regulations guiding the General Conformity Rule for the Clean Air Act, the Endangered Species Act, and the National Historic Preservation Act. USEPA has allowed a modified CEQA, called CEQA plus, to be the compliance base for projects applying for SRF funds. This draft MND has been prepared in compliance with the CEQA plus requirements for SRF funding.
- Coastal Development Permit

1.2 California Environmental Quality Act Compliance

As the Lead Agency for the proposed project under the CEQA (Public Resources Code Section 21000 et seq.), SEJPA prepared an Initial Study to determine if the proposed project would have a significant effect on the environment. The Initial Study identifies potentially significant effects to biological resources and cultural resources during construction and operations, but mitigation measures incorporated into the proposed project by SEJPA before the Initial Study and this Mitigated Negative Declaration (MND) were circulated for public review would mitigate the biological resources and cultural resources effects to a point where no significant effects would occur. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment. Therefore, pursuant to the *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines) (Section 15070[b]), SEJPA has prepared an MND for the proposed project. Included in this draft of the MND is the Initial Study documenting the reasons supporting this finding.

1.3 Public Review Process

The Draft MND is available for a 30-day public review period (Guidelines Section 15105). The public review period will begin on February 12, 2016. Written comments regarding the adequacy of the Draft MND must be received by March 14, 2016. Comments should be addressed, emailed, or faxed to:

Michael Thornton, PE
2695 Manchester Avenue
Cardiff, California 92007
thornton@sejpa.org

SEJPA shall prepare written responses to comments on environmental issues received during the noticed public review period. Written comments received by SEJPA will be included in the public record.

Copies of the Draft MND and supporting materials are available online at http://www.sejpa.org/index.php?parent_id=51&page_id=57 and at the SEJPA offices at the address provided above. Copies of the Draft MND are also available at the following locations:

- **Cardiff Library:** 2081 Newcastle Avenue, Cardiff, California 92007
- **City of Encinitas:** 505 S. Vulcan Avenue, Encinitas, California 92024
- **City of Solana Beach:** 635 Highway 101, Solana Beach, California 92075

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2 SUMMARY OF FINDINGS

2.1 Environmental Factors Potentially Affected

As discussed in Chapter 3, Initial Study Checklist, the proposed project would have no impact or less than significant impacts to the following: aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Also, as discussed in Chapter 3, with incorporation of mitigation measures, all potentially significant effects to biological resources and cultural resources would be reduced to a less than significant level.

2.2 Environmental Determination

SEJPA prepared an MND, which determined that the proposed project would have a potentially significant effect on the environment. Specific mitigation measures have been identified in Chapter 3 of this MND. The proposed project, as revised, now avoids or mitigates the potentially significant environmental effects previously identified, and the preparation of an environmental impact report is therefore not necessary.

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3 INITIAL STUDY CHECKLIST

1. Project title:

San Elijo Water Reclamation Facility Upgrades

2. Lead agency name and address:

San Elijo Joint Powers Authority
2695 Manchester Avenue
Cardiff By The Sea, California 92007

3. Contact person and phone number:

Mike Konicke, 760.753.6203

4. Project location:

2695 Manchester Avenue, Cardiff by the Sea, California 92007 (Assessor Parcel Number 2610101302), as shown on Figure 1, Regional Map, and Figure 2, Vicinity Map.

5. Project sponsor's name and address:

Same as Lead Agency

6. General plan designation:

Public/Semi-Public

7. Zoning:

Public/Semi-Public

8. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

Refer to Section 1.1.3, Proposed Project Components, above.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

Refer to Section 1.1.2, Project Location and Setting, above.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

Refer to Section 1.1.4, Discretionary Actions, above.

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.

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

San Elijo Water Reclamation Facility Upgrades
Mitigated Negative Declaration

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.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project**:**				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
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)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
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?	☐	☒	☐	☐
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 U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
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.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that 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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐
IX. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
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?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☒	☐	☐
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?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVIII. 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?	☐	☒	☐	☐
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)?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.1 Aesthetics

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The proposed project is located within the existing developed SEWRF, which is surrounded by an urban area in North County, San Diego. A site reconnaissance for the project site was recently completed by Dudek to assess potential visual impacts as a result of the proposed project. The site was evaluated from the scenic stop off the southbound I-5 north of the Manchester Avenue exit; a viewer at this location looking west would see the San Elijo Lagoon and Pacific Ocean, the existing SEWRF and surrounding residential development. The proposed 30 foot Administration and Operations building would not surpass the height of the existing bluff on the western project site boundary, nor residents residing atop the bluff. The location would also be set back from Manchester Avenue such that the building would not impede views toward the lagoon or the Pacific Ocean.

The majority of potential aesthetic impacts would be short term and temporary as they would be generally limited to the construction phase of the proposed project. Construction would require temporary staging of equipment and materials; however, all proposed construction would occur within the existing SEWRF. Upon completion of construction, visual changes would be minimal as the majority of the proposed project would be upgrades or additions to the existing SEWRF, which would blend with the existing development. Implementation of the proposed project would not result in a substantial adverse effect on a scenic vista, as the project would not block views of the Pacific Ocean or the San Elijo Lagoon. Impacts would be less than significant.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The nearest freeway or highway to the project site is I-5, approximately 300 feet east. Within San Diego County, I-5 is not designated as a state scenic highway or a county scenic highway (Caltrans 2015a). Coast Highway 101 is located approximately

1,950 feet (0.37 mile) west of the project site. Portions of Coast Highway 101 are designated as State Scenic Highway throughout California, but there are no designated portions within San Diego County (Caltrans 2015b). Implementation of the proposed project would not substantially damage scenic resources within a state scenic highway, and impacts would be less than significant.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. Currently, the project site is fully developed as the existing SEWRF, associated landscaping, and stormwater drainage facilities, as shown on Figure 3. The existing facilities within the SEWRF are shown on Figure 4. The existing facilities are separated from surrounding development by extensive existing landscape that consists of shrubs and trees.

The proposed project would construct a new administration building at the southern end of the project site, near the SEWRF entrance off Manchester Avenue. The proposed building would be located approximately 250 feet from the southern property line and approximately 85 feet from the western property line. The proposed building would be approximately 12,500 square feet and 30 feet in height (two stories), and would also contain a parking lot with associated lighting. Although design would be finalized at a later date, building material would likely consist of concrete masonry and exterior finishes, which would be similar to existing structures within the SEWRF. Additionally, the administration building would comply with all building codes and height regulations; and would not block any existing background views. Fencing surrounding the SEWRF site would be improved for proper height along with the installation of climbing deterrents, and site asphalt would be replaced.

The proposed project would include solar panels. Conceptual plans for the solar panels include an approximate 80-panel carport on the west of the generator, an approximate 300-panel ground-mounted solar field east of the generator, an approximate 200-panel carport west of the existing headworks, and an approximate 230-panel ground-mounted field north of the proposed 200-panel carport. Due to the positioning of existing and proposed SEWRF structures, and surrounding landscaping, surrounding land uses would have limited direct view to the solar panels.

All preliminary treatment upgrades, electrical upgrades, dewatering upgrades, digester improvements, aeration and return upgrades, DAF upgrades, and implementation of SCADA system hardware, would not be noticeable from areas surrounding the project

site. The majority of potential impacts to visual character would occur during the construction phase, and therefore would be short term and temporary in nature. Proposed replacement and rehabilitation of the existing SEWRF would not substantially degrade the existing character and quality of the project site and its surroundings. Impacts would be less than significant.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Lighting is currently provided throughout the existing SEWRF facilities. Any new lighting as a result of the proposed facility upgrades would be similar to existing SEWRF lighting. All new lighting associated with parking structures and perimeter lighting for security purposes during evening hours would be the minimum necessary to provide for safety. Additionally, all proposed lighting would be contained within the SEWRF boundaries, and would not result in light spillover to adjacent properties. New lighting as a result of the proposed project, compared to existing lighting, would not be substantial. The project would comply with the City of Encinitas' Lighting Guidelines stated within the 2005 Design Guidelines (City of Encinitas 2005), and would not create a new source of substantial light.

As described in Section 1.1.3, the proposed project would include four proposed solar fields. The locations of the solar fields align with the identified areas shown in Figure 5. The solar component of the proposed project is conceptual and is subject to change upon final design. Conceptual plans for solar fields include an approximate 80-panel carport on the west of the generator, an approximate 300-panel ground-mounted field east of the generator, an approximate 200-panel carport west of the existing headworks, and an approximate 230-panel ground-mounted field north of the proposed 200-panel carport. The solar panels are designed to absorb rather than reflect light, and the project is not expected to create a new substantial source of glare. Refer to Section 3.4, Biological Resources, for additional discussion regarding the solar fields. Overall, impacts related to light and glare would be less than significant.

3.2 Agriculture and Forestry Resources

a) Would the project 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?

No Impact. The SEWRF site is located on land classified as Urban and Built-Up Land, on the County Important Farmland Mapping and Monitoring Program (FMMP) (DOC 2015a). The project is immediately surrounded by residential development to the west, north, and southeast; and is immediately west of I-5. The San Elijo Lagoon lies south of the SEWRF past Manchester Avenue, and is categorized as Other Land under the FMMP. Therefore, the proposed project would not convert any land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. According to the City of Encinitas Land Use Map (City of Encinitas 2010), the existing zoning for the site is Public/Semi-Public. The approximate 28.4 acres of the City that are currently contracted under the Williamson Act program are located in the north-central portion of the City, and are designated as "Agricultural Preserve" lands. The Agricultural Preserve/Williamson Act Contract Lands are located approximately 2.7 miles north of the project site. No part of the project site is located on land zoned for agricultural use or under a Williamson Act contract, and no impact would occur.

c) Would the project 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 located in a highly urban environment, zoned Public/Semi-Public, and surrounded by residential land use. There are no forestry resources on or near the project site. No impact to forest land or forest resources would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See Response 3.2(c). No impact would occur.

e) Would the project 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. The proposed project would involve minor alterations to land and existing facilities that would not result in changes in land uses. The project site and vicinity is urbanized, and as previously stated, approximately 2.7 miles south of the closest agricultural land uses within the City. The proposed on-site facility improvements would not result in any effect to farmland, agricultural land, or forestland. Therefore, no impact would occur.

3.3 Air Quality

This section is based in part on air quality emissions modeling conducted by Dudek and is included as Appendix A to this MND.

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The San Diego Air Pollution Control District (SDAPCD) and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plans for attainment and maintenance of the Ambient Air Quality Standards (AAQS) in the San Diego Air Basin (SDAB); specifically, the State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS).[1] The federal ozone (O_3) maintenance plan, which is part of the SIP, was adopted in 2012. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the SDAB based on the National Ambient Air Quality Standards (NAAQS). The RAQS was initially adopted in 1991 and is updated on a triennial basis (most recently in 2009). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The SIP and RAQS rely on information from the California Air Resources Board (CARB) and

[1] For the purpose of this discussion, the relevant federal air quality plan is the ozone maintenance plan (SDAPCD 2012). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in county, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the county as part of the development of their general plans.

If a project proposes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality. The proposed project would be consistent with the existing zoning and General Plan land use designations for the project site, and would only improve and expand upon the existing use on the project site. Additionally, the proposed project would not include a residential component that would increase local population growth.

Based on the nature of the wastewater facility improvements, implementation of the proposed project would not result in development in excess of that anticipated in local plans or increases in population/housing growth beyond those contemplated by SANDAG. As such, vehicle trip generation and planned development for the various project component locations is considered to be anticipated in the SIP and RAQS. Because the proposed land uses and associated vehicle trips are anticipated in local air quality plans, the proposed upgrades would be consistent at a regional level with the underlying growth forecasts in the RAQS. Impacts would be less than significant.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact.

Construction Impacts

Construction of the proposed project would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. Fugitive dust (Particulate Matter 10 (PM_{10}) and Particulate Matter 2.5 ($PM_{2.5}$)) emissions would primarily result from grading and site preparation

activities. Nitrogen oxide (NO_x) and carbon monoxide (CO) emissions would primarily result from the use of construction equipment and motor vehicles.

Emissions from the construction phase of proposed project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2, available online (www.caleemod.com). For the purposes of modeling, it was assumed that construction of the proposed project would commence in January 2017 and would occur intermittently over an approximately 17-month period.

Grading and excavation activities were assumed to cover approximately 4.1 acres for the administration building and solar panels. It was assumed that construction of the proposed project would be balanced on site and no soil would be exported off site for construction of the solar panels and that 160 cubic yards of soil export would occurring during grading of the administration building.

Equipment mix assumptions for construction activity are based on typical wastewater treatment plant upgrades, general administrative building construction, and solar energy installation. Additionally, typically construction practices and CalEEMod default equipment where assumed where appropriate. The equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it is generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week. A detailed depiction of the construction schedule—including information regarding subphases and equipment assumed for each subphase—is included in Appendix A.

Construction of the proposed project would be subject to SDAPCD Rule 55 – Fugitive Dust Control. This rule requires that construction of the proposed upgrades include steps to restrict visible emissions of fugitive dust beyond the property line (SDAPCD 2009). Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities. Construction of the proposed upgrades would also be subject to SDAPCD Rule 67.0.1 – Architectural Coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce volatile organic compound (VOC) emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2001).

Table 3.3-1, Estimated Maximum Daily Construction Emissions, shows the estimated maximum unmitigated daily construction emissions associated with the construction

phases of the proposed upgrades. Complete details of the emissions calculations are provided in Appendix A.

Table 3.3-1
Estimated Maximum Daily Construction Emissions (pounds per day)

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
2017	2.95	26.82	21.77	0.04	5.55	3.21
2018	15.03	3.81	5.68	0.01	0.51	0.27
Maximum Daily Emissions	***15.03***	***26.82***	***21.77***	***0.04***	***5.55***	***3.21***
Emission Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: CalEEMod Version 2013.2.2. See Appendix A for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown in Table 3.3-1, daily construction emissions for the proposed project would not exceed the County of San Diego's significance thresholds for VOC, NO_x, CO, sulfur oxides (SO_x), PM_{10}, or $PM_{2.5.}$ Impacts would be less than significant.

Operational Impacts

Following completion of construction activities, operations of the SEWRF would be the similar to existing conditions and may operate more efficiently due to the use of newer equipment. The proposed project would include the addition of an administrative building, which would result criteria air pollutant emissions from the use of consumer cleaning products, space heating, and the operation of landscaping and maintenance equipment. Additionally, the proposed project would construction a solar panel field that would result in operational emissions from cleaning and maintenance activities. Table 3.3-2, Estimated Maximum Daily Operational Emissions, shows daily operational criteria air pollutant emission for the proposed project.

Table 3.3-2
Estimated Maximum Daily Operational Emissions (pounds per day)

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	***0.35***	***0.07***	***0.06***	***0.01***	***0.01***	***0.01***
Emission Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: CalEEMod Version 2013.2.2. See Appendix A for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter

As shown above, operational criteria air pollutant emission sources would not exceed the SDAPCD thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5.}$ Impacts would be less than significant.

c) Would the project 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)?

Less Than Significant Impact. In analyzing cumulative impacts from the proposed project, the analysis must specifically evaluate a proposed project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the California Ambient Air Quality Standards (CAAQS) and NAAQS. If the proposed project do not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the proposed project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the proposed project would only be considered to have a significant cumulative impact if its contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions within the basin to ensure the SDAB continues to make progress toward NAAQS and CAAQS attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative impacts if they represent development beyond regional projections.

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions associated with construction generally result in near-field impacts. The nonattainment status is the result of cumulative emissions from all sources of these air pollutants and their precursors within the SDAB. As previously discussed, the emissions of all criteria pollutants would be below the significance thresholds. Construction would be short term and temporary in nature lasting approximately 17 months. Additionally,

construction activities required for the implementation of proposed upgrades would be considered characteristic of a utility infrastructure project and would not require atypical construction practices that would include high-emitting activities. Once construction is completed, construction-related emissions would cease. Operational emissions generated by the proposed project would also not result in significant criteria air pollutant emissions. As such, the proposed project would result in less than significant impacts to air quality relative to operational emissions.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and by the county as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would not be considered to result in cumulatively considerable impacts from operational emissions. As discussed above, the proposed project is consistent with the existing zoning and land use designations on site. Furthermore, implementation of the proposed project would not result in additional population growth or substantial growth-inducing effects that have not been anticipated in local planning documents; thus, it would be consistent at a regional level with the underlying growth forecasts in the SIP and RAQS. As a result, the proposed project would not result in a cumulatively considerable contribution to regional O_3 concentrations or other criteria pollutant emissions. Cumulative impacts would be less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. In addition to impacts from criteria pollutants, impacts from the proposed project may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or hazardous air pollutants (HAPs). State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program, and is aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal HAPs, and is adopting appropriate control measures for sources of these TACs.

The greatest potential for TAC emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks, and the associated health impacts to sensitive receptors. The closest sensitive receptors to the project site are single family residential homes located 150 feet to the west.

Construction of the proposed project would not require the extensive use of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions, and would not involve extensive use of diesel trucks, which are also subject to an Airborne Toxics Control Measure. Construction of the proposed upgrades would occur over 17 months. Following completion of construction activities, any TAC emissions would cease and operational emissions would be similar or reduced from existing conditions due to the replacement of older wastewater treatment equipment with new equipment. As such, no additional sources of TACs would occur during operation of the proposed project. As such, the exposure of project-related TAC emission impacts to sensitive receptors would be less than significant.

e) Would the project create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and architectural coatings. Such odors are temporary and for the types of construction activities anticipated for the proposed project, would generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered less than significant.

Operational odor sources typically occur from certain industrial processes and use of heavy industrial or commercial equipment. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, there are no quantitative or formulaic methodologies to determine if potential odors would have a significant impact. Examples of land uses and industrial operations that are commonly associated with odor complaints include agricultural uses, wastewater treatment plants, food processing facilities, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. In addition to the odor source, the distance between the sensitive receptor(s) and the odor source, as well as the local meteorological conditions, are considerations in the potential for a project to frequently expose the public to objectionable odors. Although localized air quality impacts are focused on potential impacts to sensitive receptors, such as residences and schools, other land uses where people may congregate (e.g., workplaces) or uses with the intent to attract people (e.g., restaurants and visitor-serving accommodations), should also be considered in the evaluation of potential odor nuisance impacts.

The proposed project would only replace existing equipment in the SEWRF with newer equipment that would produce similar or fewer odors. The other portions of the proposed project would include upgrades to the existing on-site facility, and would not result in the creation of a land use or process that is associated with nuisance odors. Therefore, operation of the proposed project would result in an odor impact that is less than significant.

3.4 Biological Resources

This section is based on the Biological Resources Technical Report (biological report) prepared by Dudek in January 2016. The biological report is included as Appendix B to this MND. Background and methodologies regarding the biological resources analysis are found in Appendix B.

a) Would the project 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?

Less Than Significant With Mitigation Incorporated. There are no federally listed plants that have a moderate or high potential to occur in the project site. The coastal California gnatcatcher, federally listed threatened, has potential to occur in the California sagebrush scrub on site. Least Bell's vireo (*Vireo bellii pusillus;* federally and state listed endangered) has potential to occur in the riparian forest habitat immediately south of the project site.

Torrey pine (*Pinus torreyana* ssp. *torreyana*) is present on site—three trees north of the operations buildings and one tree further north near the spoils area. There is a low to moderate potential for the following species to occur in the California sagebrush scrub in the project site: South Coast saltscale, San Diego sand aster, Del Mar Mesa sand aster, beach goldenaster, sea dahlia, chaparral ragwort, San Diego desert woodrat, pallid bat, Yuma myotis, Dulzura pocket mouse, spotted bat, Townsend's big-eared bat, and western mastiff bat.

Construction

Direct

Potential construction-related direct impacts to special-status species could result from unintentional clearing, trampling, or grading outside of the proposed project impact area

during construction. Accidental clearing, trampling, or grading outside designated construction zones may occur during construction activities for various reasons, including incorrect construction grading plans, human error in interpreting grading plans, human error or accidents in operating construction equipment, and misunderstandings or disregard by construction personnel in adhering to construction plan requirements, including avoidance of biological resources. Therefore, construction would result in potentially significant short-term direct impacts to special-status species. However, with implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-3, potentially significant impacts would be reduced to a level below significance. MM-BIO-1 requires the project biologist to conduct a Worker Environmental Awareness Program (WEAP) for the contractor to ensure compliance with the mitigation measures. MM-BIO-2 requires demarcation of special-status species and their habitat using highly visible materials in the field that minimize unintentional impacts. Training would aid in enforcing the requirements that construction must be restricted to designated areas and special-status species and their habitat outside the project impact area would be avoided. Construction-related impacts to Torrey pines and the California sagebrush alliance, habitat for special-status species, will be avoided through MM-BIO-3, which requires that the locations of these resources and their buffers, if applicable, be delineated on construction drawings and demarcated in the field prior to on-site grading and construction activities. Therefore, impacts would be less than significant.

Indirect

Special-status species could be indirectly impacted during construction activities, such as increased construction-related noise, change in hydrology, and the generation of fugitive dust. The coastal California gnatcatcher has potential to occur in the California sagebrush scrub on site, and least Bell's vireo has potential to occur in the riparian forest habitat immediately south of the project site.

Indirect impacts such as construction-related noise could interfere with breeding and nesting behavior of these species. Increased dust could affect special-status nesting birds, reptiles, or amphibians (adjacent to the site). These impacts would be potentially significant. However, with incorporation of mitigation measures MM-BIO-1, MM-BIO-2, MM-BIO-3, MM-BIO-4 impacts would be reduced to a level below significant. Mitigation measures MM-BIO-1 though MM-BIO-3 are briefly described above and listed in full below. Mitigation measure MM-BIO-4, preconstruction surveys and avoidance measures, requires buffers to nesting birds, which would also reduce indirect impacts during construction, such as fugitive dust and construction-related noise.

Additionally, compliance with existing regulations would minimize potential indirect impacts to biological resources. Construction would comply with SDAPCD Rule 55 – Fugitive Dust Control to minimize dust generation during ground disturbing activities, existing federal and state pesticide regulations, and Regional Water Quality Control Board (RWQCB) discharge requirements (as described in Section 3.9, Hydrology and Water Quality, of this MND) during construction. Therefore, impacts would be less than significant.

Operation

Direct

Direct impacts to special-status wildlife species would primarily result from the permanent loss of suitable habitat as a result of buildout of the solar fields and administration building. As described previously, the existing California sagebrush alliance on the project site would be avoided through incorporation of mitigation measure MM-BIO-3 during construction. Because the native habitat on site is limited to a small patch of California sagebrush alliance that would be avoided (MM-BIO-3), direct impacts to suitable habitat for species, such as coastal California gnatcatcher or San Diego desert woodrat, is not expected. The solar fields would be constructed in disturbed habitat, but portions of the disturbed habitat support shrubs and mature ornamental plants. The administration building would be developed on an existing manicured lawn. The loss of disturbed habitat and ornamental plantings could result in the loss of foraging habitat for special-status bats and birds, including raptors. However, the project site provides marginal foraging habitat compared to the open space areas adjacent to the project site to the south, southwest, and east.

With respect to special-status plant species, the Torrey pines would also be avoided through incorporation of mitigation measure MM-BIO-3, which requires that the trees and a buffer, based on crown size, around the trees would not be directly impacted by the new structures.

Therefore, with incorporation of mitigation measure MM-BIO3, direct impacts would be less than significant.

Indirect

Because the proposed project is located on an existing wastewater treatment facility operated by day-time staff, long-term indirect impacts to special-status species are anticipated to be minimal. Typical project-related indirect impacts, such as increased

human activity and increased vehicle collisions, are not anticipated because the capacity and number of operational staff would not change as a result of the proposed project. Additionally, the project site does not contain and is not adjacent to wildlands where there is risk for wildfire; thus, indirect impacts to special-status species associated with an increased risk of wildfire would be less than significant.

The administration building and solar fields represent the primary potential for indirect impacts to special-status species. The administration building and parking lot would introduce new landscaping, lighting, and may require the use of outdoor trash receptacles which increase potential for indirect impacts to special-status species. Therefore, indirect impacts resulting from development of the administration building would be potentially significant. However, with incorporation of mitigation measures MM-BIO-5 through MM-BIO-8, potentially significant impacts would be reduced to a level below significance.

Mitigation measure MM-BIO-5 requires all potential landscaping proposed as part of the project be native or non-native, non-invasive, drought-tolerant plant species to avoid alteration of habitat composition. Mitigation measure MM-BIO-6 requires that any new outdoor trash receptacles be animal-resistant to decrease the likelihood of attracting urban-related animal species. Mitigation measure MM-BIO-7 requires any nighttime security, maintenance, or emergency lighting to be directed away from natural areas to minimize adverse effects to nocturnal species. Mitigation measure MM-BIO-8 prohibits the use of anticoagulants for rodent control, which would avoid the risk of secondary poising of predatory wildlife. Additionally, compliance with existing regulations would minimize potential indirect impacts to biological resources. Operation would comply with existing federal and state pesticide regulations and RWQCB discharge requirements (as described in Section 3.9 of this MND) during operations.

Reflection and refraction of light from solar panels and mirrors can appear as a water body and may act to attract wildlife, especially water birds (Appendix B). This has been referred to as the "lake effect," and it has the potential to result in bird collision, especially where projects are sited near existing water bodies. Therefore, the proposed solar fields would result in a potentially significant indirect impact to special-status avian species. However, with the incorporation of mitigation measure MM-BIO-9, impacts would be reduces to a level below significance. Mitigation measure MM-BIO-9 requires that either anti-reflective or low-glare solar panels be used or that the design the configuration of solar panels does not mimic natural waterbodies (e.g., avoid large contiguous areas of solar panels; intersperse areas of panels with areas of no panels).

Therefore, with incorporation of mitigation measures MM-BIO-5 through MM-BIO-9 and compliance with existing regulations, indirect impacts would be less than significant.

Mitigation Measures

MM-BIO-1 Environmental Awareness Training

Prior to the initiation of on-site grading and construction activities, the project biologist shall conduct a Worker Environmental Awareness Program (WEAP) with the contractor.

The project biologist shall perform the following:

1. Provide the training materials for WEAP training. These materials shall include the measures and mitigation requirements for biological resources, the location of special-status resources, including federally designated critical habitat for coastal California gnatcatcher, and designated work areas.
2. Copies of mitigation measures, and permits from resource agencies, if applicable, shall be made available by the project biologist.
3. Complete a timely review of construction schedules to ensure that timing/location of construction activities do not conflict with other measures or mitigation requirements (e.g., pre-construction nesting bird surveys).
4. Ensure that construction area boundary markers are placed to comply with applicable avoidance and/or buffer measure requirements, if necessary.

MM-BIO-2 General Construction-Related Avoidance and Minimization Measures

Construction activities shall be performed in accordance with applicable local, state, and federal laws.

Additionally, the following avoidance and minimization measures shall be implemented during project construction. These measures have been organized into subcategories for ease of reading.

Construction Work Hours

Construction activities within 50 feet of the outside edge of the project impact area containing habitat for wildlife shall be prohibited between sunset and sunrise, and all construction-related lighting shall be turned off during that period, with the exception of lighting for maintenance, security patrols, and emergency (defined by an imminent threat to life or significant property) activities. Lighting for maintenance within 50 feet of the outside edge of the project impact area containing habitat for special-status wildlife will be directed away from natural areas.

Flagging/Fencing/Demarcation

The project biologist shall demarcate the location of special-status biological resources inside the existing fencing, including the California sagebrush alliance, the federally designated critical habitat for coastal California gnatcatcher, and Torrey pines within the project site, using highly visible materials in the field and review with the contractor in accordance with the construction plans.

Debris/Non-Native Vegetation/Pollution

Fully covered outdoor trash receptacles that are animal-proof shall be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles shall be removed at least once a week from the project site.

No litter, construction materials, or debris shall be discharged into stream channels or other drainages.

Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter (anything shiny, such as broken glass), vehicle fluids, and food waste from the project area on a daily basis.

No construction material shall be stockpiled in stream channels or other drainages.

Vehicle and Equipment Restrictions and Maintenance

Maximum construction vehicle speed shall be 15 miles per hour (mph) during construction. Nighttime construction shall be minimized to the extent possible. However, if nighttime construction or construction-related activity (e.g., security patrols, equipment maintenance) is necessary, then the speed limit shall be 10 mph.

Vehicle operation within stream channels or other drainages when surface water is present shall be prohibited. Any equipment or vehicles driven adjacent to a jurisdictional channel shall be checked and maintained by the operator daily to prevent leaks of oil or other petroleum products that could be deleterious to aquatic life if introduced to the watercourse.

Staging and storage areas for spoils, equipment, materials, fuels, lubricants, and solvents will be located outside stream channels or other drainages and within the designated impact areas or areas already developed. Stationary equipment, such motors, pumps, generators, compressors, and welders, located within or adjacent to stream channels or other drainages shall be positioned over drip-pans or other containment. Prior to refueling and lubrication, vehicles and other equipment shall be moved away from the state-jurisdictional channels.

Erosion/Silt

During construction activities, temporary erosion control devices, such as straw bales, silt fencing, and sand bags, shall be used to prevent siltation in jurisdictional areas. Coir rolls, erosion control mats or blankets, straw or fiber wattles, or similar erosion control products shall be composed of natural-fiber, biodegradable materials; photodegradable or other plastic erosion control materials shall be prohibited.

Silt settling basins installed during the construction process shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.

Other Restrictions on Construction Activities and Personnel

During construction, no pets, such as cats or dogs, shall be permitted on the project's construction sites.

MM-BIO-3 Species Avoidance Measures

Torrey Pines

There are four Torrey pines on the project site. Prior to finalizing construction drawings, the trees and dripline shall be delineated by the project biologist. At a minimum, all structures shall be constructed no closer than 5 feet outside the dripline of the tree. The location of the trees, the trees' dripline, and 5-foot buffer around the trees' dripline shall be included on the construction drawings and demarcated in the field prior to on-site grading and construction activities.

California Sagebrush Alliance

There is a patch of Californian sagebrush alliance on the project site. Prior to finalizing construction drawings, the California sagebrush alliance shall be delineated by the project biologist, and all structures will be constructed outside of the delineated area. The location of the California sagebrush alliance will be included on the construction drawings and demarcated in the field prior to on-site grading and construction activities.

Federally Designated Critical Habitat for Coastal California Gnatcatcher

There are approximate 4 acres of federally designated critical habitat for coastal California gnatcatcher on the east side of the project site (see Appendix B). Prior to finalizing construction drawings, the critical habitat shall be delineated by the project biologist and all structures shall be constructed outside of the delineated area. The location of the critical habitat shall be included on the construction drawings and demarcated in the field prior to on-site grading and construction activities.

MM-BIO-4 Nesting Bird Surveys and Nest Buffers

This measure would protect nesting special-status birds and more common species protected under the Migratory Bird Treaty Act (MBTA), a federal

law, which prohibits the "take" of any migratory bird or any part, nest, or eggs of any such bird. The MBTA applies to more than 800 species of birds, including rare and common species.

Pre-Construction Surveys

The project biologist shall conduct pre-construction surveys in the proposed project impact area and a 500-foot buffer around the impact area no earlier than 7 days prior to any on-site grading and construction activities that would occur during the nesting/breeding season of special-status birds or birds protected under the MBTA. In general, the pre-construction surveys shall be conducted between January 15 and September 15, or as determined by the project biologist.

The purpose of the pre-construction surveys will be to determine whether occupied nests are present in the impact zone or within 500 feet of the impact zone boundary.

Avoidance Measures

If occupied nests are found, then limits of construction to avoid occupied nests shall be established by the project biologist in the field with flagging, fencing, or other appropriate barriers (e.g., 250 to 500 feet) and construction personnel shall be instructed on the sensitivity of nest areas. The project biologist shall serve as a weekly construction monitor during those periods when construction activities are to occur near active nest areas (i.e., within 100 feet of setback) to avoid inadvertent impacts to these nests. The project biologist may adjust the 250-foot or 500-foot setback at his or her discretion depending on the species and the location of the nest (e.g., if the nest is well protected in an area buffered by dense vegetation). Once the nest is no longer occupied for the season, construction may proceed.

MM-BIO-5 Restrictions on Landscaping Plants

Landscape plants shall not include invasive plant species, as identified by the most recent version of the California Invasive Plant Inventory for the project region, as published by the California Invasive Plant Council. Landscape plans shall include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates.

MM-BIO-6 Requirement for Residents to Use Animal- and Weather-Resistant Trash Receptacles

If outdoor trash receptacles are needed for the project, the San Elijo Joint Powers Authority (SEJPA) shall keep trash in covered containers that are fitted with animal- and weather-resistant lids to (1) prevent artificially increasing the populations of non-native rats (*Rattus* spp.), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), skunks (*Mephitis mephitis*, *Spilogale gracilis*), and other mesopredators; (2) discourage special-status and other wildlife species from foraging on trash; and (3) reduce negative interactions between wildlife and humans.

MM-BIO-7 Restrictions on Operation-Related Lighting

The existing wastewater facility would continue to be operated by during hours of daylight. However, if lighting for maintenance, security patrols, or an emergency (defined by an imminent threat to life or significant property) activities is required, lighting for nighttime activities shall be directed away from natural areas.

MM-BIO-8 Restrictions on the Use of Rodenticides

The use of anticoagulants (used for rodent control) shall be prohibited on the project site.

MM-BIO-9 Restrictions on Solar Fields

The proposed solar fields shall incorporate anti-reflective or low-glare solar panels or shall be designed in a configuration so that the solar panels do not mimic natural waterbodies (e.g., avoid large contiguous areas of solar panels; intersperse areas of panels with areas of no panels). The project biologist shall review the solar panel design or specifications prior to installation to confirm that measure has been satisfied.

b) Would the project 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 U.S. Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated. There are no riparian habitats or other sensitive natural communities on the project site, and, thus, no direct impacts would

occur during construction or during operations. There is riparian habitat adjacent to the project site beyond the property line for the SEWRF facility, and there is a fence between the project site and the adjacent riparian habitat. Direct impacts would be less than significant. Analysis for potential indirect impacts during construction and operations is discussed below.

Construction

As described in response 3.4(a), potential short-term or temporary indirect impacts to riparian habitat or other sensitive natural communities would primarily result from construction activities and include impacts related to, or resulting from, the generation of fugitive dust; changes in hydrology resulting from construction, including sedimentation and erosion; and the release of chemical pollutants (including herbicides). Incorporation of mitigation measures MM-BIO-1 and MM-BIO-2 (described and listed above), as well as compliance with SDAPCD Rule 55 – Fugitive Dust Control to minimize dust generation during ground-disturbing activities, existing federal and state pesticide regulations, and RWQCB discharge requirements (as described in Section 3.9 of this MND) during construction, would reduce potentially significant indirect impacts to a level below significance.

Operation

As described in response 3.4(a), because the proposed project is located on an existing wastewater treatment facility operated by day-time staff, long-term indirect impacts to riparian habitat or other sensitive natural communities adjacent to the project site are anticipated to be minimal; typical project-related indirect impacts, such as increased human activity and increased risk of wildfire are not anticipated and would be less than significant.

As described in response 3.4(a), the administration building and parking lot would introduce new landscaping, which could result in potentially significant indirect impacts to adjacent riparian habitat. Incorporation of mitigation measure MM-BIO-5 (as described and listed above), as well as compliance with existing federal and state pesticide regulations and RWQCB discharge requirements (as described in Section 3.9 of this MND), would reduce potentially significant indirect impacts to a level below significance.

c) Would the project 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?

Less Than Significant With Mitigation Incorporated. An off-site creek has been contained in a concrete-lined channel that flows into the San Elijo Lagoon (Appendix B). There are two concrete-lined drainage ditches on the project site—one north of the existing administration building and one north of the aeration basins—both of which flow directly into this off-site concrete-lined flood control channel. There is another concrete-lined drainage ditch on the southern end of the project site that flows east of the existing lawn and into the off-site concrete-lined flood control channel; a portion of the low-flow water of this channel is diverted back to the facility and used for treatment. To ensure a conservative analysis with respect to impacts to waters of the United States/state under the jurisdiction of the Army Corps of Engineers (ACOE), California Department of Fish and Wildlife (CDFW), and RWQCB, it is assumed that the above described channels are jurisdictional waters of the United States/state.

Construction

Direct

Potential construction-related direct impacts to waters of the United States/state could result from unintentional grading outside of the proposed project impact area during construction. However, incorporation of mitigation measures MM-BIO-1 and MM-BIO-2, as described and listed above, would reduce potentially significant impacts to a level below significance. Specifically, these measures require demarcation of special-status resources, including waters of the United States/state and a WEAP for the contractor to ensure compliance with required mitigation measures. Incorporation of mitigation measures MM-BIO-1 and MM-BIO-2, direct impacts to waters of the United States/state would be avoided and impacts would be reduced to a level below significance.

Indirect

Refer to response 3.4(b). Potential indirect impacts to waters of the United States/state would be similar to potential indirect impacts to riparian habitat. Incorporation of mitigation measures MM-BIO-1 and MM-BIO-2 and compliance with existing regulations related to dust control, pesticides, and discharge would reduce potentially significant indirect impacts to a level below significance.

Operation

Direct

The two concrete-lined drainage ditches on the project site, one of which is north of the existing administration building and one of which is north of the aeration basins, would not be directly impacted by the proposed project. Although final construction plans have not been prepared, the concrete-lined drainage ditch on the southern end of the project site that flows east of the existing lawn and into the off-site concrete-lined flood control channel may be covered and converted into a piped channel. Additionally, it is possible that portions of the off-site concrete-lined flood control channel that is tributary to the San Elijo Lagoon may be covered. However, the channel configuration would not be modified. The only change from the existing condition would be covering the channel.

Covering channels and/or converting channels to a pipe channel could result in the loss of production in organisms due to the loss of sunlight, such as algae, that form the base of the food chain. However, the channels would continue to provide flow downstream and to the treatment plant and provide the same flood storage and flood-flow modification as its existing condition. Therefore, this potential direct impact would be less than significant because the loss of biological value due to covering or piping the existing concrete-lined channels would not be substantial as there would not be a net loss of channels.

Indirect

Refer to response 3.4(b). Potential indirect impacts to waters of the United States/state would be similar to potential indirect impacts to riparian habitat. Incorporation of mitigation measure MM-BIO-5 as well as compliance with existing federal and state pesticide regulations and RWQCB discharge requirements (as described in Section 3.9 of this MND), would reduce potentially significant indirect impacts to a level below significance.

d) Would the project 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?

Less Than Significant Impact With Mitigation Incorporated.

Construction

Direct

Smaller, urban-adapted wildlife may move across the existing facility site at night, and smaller mammals, reptiles, birds, and invertebrates could use the native habitat to connect to larger intact habitats nearby. Because the project site is fenced and bordered by I-5 and residential development the project site is not a wildlife corridor or habitat linkage. Thus, potential short-term direct impacts to wildlife movement would be less than significant.

Additionally, required mitigation measures MM-BIO-1 (environmental awareness training) and MM-BIO-2 general construction-related avoidance and minimization measures) would further minimize potential effects to wildlife movement by reducing potential to impact sensitive resources during construction.

Indirect

Indirect construction-related impacts such as increased human activity during construction activities during the day are not anticipated to be significant impacts because species that would travel through the site during the day are already accustomed to activity from the existing facilities. Other potential construction-related indirect impacts to wildlife that could potentially use areas adjacent to the site for movement include increased noise and lighting, which could result in potentially significant impacts. However, MM-BIO-2 (general construction-related avoidance and minimization measures) requires construction activities within 50 feet of the outside edge of the project impact area containing habitat for wildlife would be prohibited between sunset and sunrise, and all construction-related lighting would be turned off during that period, with the exception of lighting for maintenance, security patrols, and emergency activities. Lighting for maintenance within 50 feet of the outside edge of the project impact area containing habitat for wildlife would be directed away from natural areas. Thus, the mitigation measure would minimize the effects that light pollution has on nocturnal species. Additionally, if lighting is necessary during nighttime hours for maintenance, security patrols, and emergencies, the lighting would be directed away from natural areas, which would also minimize the effects that light. MM-BIO-2 would minimize the potential effects of noise and vibration on wildlife by limiting construction to designated construction areas and limiting vehicle speeds to 15 mph. Limiting construction work to designated construction areas provides areas for wildlife to relocate away from construction areas and lower speeds reduces the noise emitted and vibrations from construction-related

vehicles and equipment. Therefore, potentially significant impacts would be reduced to a level below significance with the incorporation of mitigation measures.

Operation

Direct

As described above, the native habitat on site is limited to a small patch of California sagebrush alliance that would be avoided through implementation of MM-BIO-3, direct impacts to wildlife movement are not expected. The loss of disturbed habitat and ornamental plantings could result in the loss of foraging habitat for special-status bats and birds that use the area while traveling between patches of habitat. However, the project site provides marginal foraging habitat compared to the open space areas adjacent to the project site to the south, southwest, and east. Therefore, with incorporation of mitigation measure MM-BIO-3, potentially significant direct impacts would be reduced to a level below significance.

Indirect

Typical project-related indirect impacts, such as increased human activity and increased vehicle collisions, are not anticipated because the capacity and number of operational staff would not change as a result of the proposed project. Additionally, potential long-term permanent indirect impacts from increased noise to wildlife that could potentially use the site for movement would be less than significant because the proposed project would not result in an increase in noise levels (see Section 3.12, Noise, of this MND). The existing wastewater treatment facility would continue to be operated during hours of daylight. However, there is potential for new nighttime lighting to adversely affect wildlife movement, which could result in a potentially significant impact. Mitigation measure MM-BIO-7 (restrictions on operations-related lighting) would be implemented if lighting for maintenance, security patrols, or emergency activities is required and would require lighting for nighttime activities be directed away from natural areas. MM-BIO-7 would reduce indirect effects on nocturnal activity, if nighttime lighting was required for maintenance, security, or for an emergency, to a level below significance.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. SEJPA is a state agency; therefore, it is not subject to the requirements or guidelines set by local agencies, such as the City of Encinitas. SEJPA does not have policies for protecting biological resources, such as a tree policy. Therefore, the proposed

project would not conflict with a local policy or ordinance protecting biological resources and no impact would occur.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. Several conservation planning efforts are currently in progress in San Diego County with the long-term goal of establishing a regional habitat reserve system that will protect native habitat lands and their associated biota. The Multiple Habitat Conservation Program (MHCP) Subregional Plan and *Final Environmental Impact Statement/ Environmental Impact Report* (USFWS and SANDAG 2003) were adopted by the San Diego Association of Governments (SANDAG) on March 28, 2003. The City of Encinitas is within the MHCP planning area, and the Draft Encinitas Subarea Plan (City's Subarea Plan) was prepared in June 2001 (Ogden and Conservation Biology 2001).

SEJPA is not a permittee of the MHCP and, thus, not subject to the MHCP or the City's Subarea Plan. This analysis focuses on whether the proposed project would conflict with this Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) plan.

In the City's Subarea Plan, lands identified for conservation are designated as Hardline or Softline Focused Planning Areas (FPAs). Hardline FPAs include lands with existing development agreements that identify designated development and biological preserve areas. Softline FPAs include lands where conservation will be achieved through the application of development and conservation standards and criteria as outlined in the City's Subarea Plan.

There are no FPAs on the project site. Adjacent to the project site directly west of the facility, the City's Subarea Plan describes this area as a Hardline FPA (Ogden and Conservation Biology 2001, Figure 4-3) associated with existing residential developments and governed by homeowner's associations (HOAs) that will be maintained according to HOA guidelines. The HOAs will be responsible for controlling trash, fire, and illegal encampments.

The proposed project would not directly impact the adjacent Hardline FPA, nor would it preclude the HOA from managing and maintaining the area as open space. Thus, the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP and no impact would occur.

Although the SEJPA is not required to comply with the City's Subarea Plan, the proposed project and mitigation measures, as described and listed above, would avoid and minimize the indirect impacts addressed in Section 4.2.2, Land Uses Planned Adjacent to the Preserve, of the City's Subarea Plan. Specifically, the project does not drain into the adjacent FPA, which is upslope on the other side of the concrete-lined channel. Potential impacts due to potential erosion and sedimentation would be addressed through MM-BIO-2 and compliance with RWQCB discharge requirements (as discussed in Section 3.9 of this MND). Potential impacts due to lighting would be addressed through MM-BIO-7. Potential impacts due to construction-related noise would addressed through MM-BIO-2 and MM-BIO-4. Operations-related noise would not increase. Potential impacts due to the spread of invasive species into the FPA would be addressed through MM-BIO-5. Additionally, the adjacent off-site concrete-lined flood control channel serves as a natural barrier between the project site and the FPA. Therefore, impacts would be less than significant.

3.5 Cultural Resources

This section is based on Phase I Resources Technical Report (cultural report) prepared by Dudek in January 2016. The cultural report is included as Appendix C to this MND. Background and methodologies regarding the cultural resources analysis are found in Appendix C.

Previous Cultural Resources Investigations

A records search conducted by SCIC staff indicates that no previously recorded cultural resources are located within the project site. However, SCIC records do indicate that 29 cultural resources have been recorded within a 0.5-mile buffer of the proposed project. Of the 29 resources previously recorded, 24 are cultural sites and six are isolates (isolated artifacts or materials). Of the 29 total resources identified in the area surrounding the project site, 23 are prehistoric in age, and four sites are historic in age with no prehistoric component. Refer to Appendix C for full results.

SCIC records indicate that 36 previous cultural resources studies have been conducted within the 0.5-mile SCIC record search area. Six of these previous studies have included all, or at least a portion of, the area of potential effect (APE), as shown in Table 3.5-1. These records suggest that some, or all, of the APE has been previously studied multiple times.

Table 3.5-1
Previous Studies Performed in the Project APE

NADB ID#	Author	Date	Report Title
SD-00550	Cupples, Sue Ann	1975	San Elijo Water Pollution Control Facility Archaeological Survey Project
SD-01684	Smith, Brian F.	1986	An Archaeological Survey of the 11-Acre Shelley/Manchester Property and the Evaluation of Site SDi-10220
SD-07117	City of San Diego	1974	Draft EIR San Elijo Lagoon-Acquisition
SD-11436	Bonner, Wayne H. Keasling, James M.	2007	Cultural Resource Records Search Results for T-Mobile Facility Candidate SD06626B (San Elijo Water Reclamation Facility), 2695 Manchester Avenue, Cardiff-By- The- Sea, San Diego County, California
SD-12038	Guerrero, Monica Gallegos, Dennis R.	2007	Cultural Resources Monitoring Report for the Solana Beach Forceman Project, City of Solana Beach, California
SD-13287	Loftus, Shannon	2011	AT&T Site SD0453 Manchester 2775 Caminito Ocean Cove Cardiff, San Diego County, California 92007

Source: Appendix C

Archival and Building Development Research

As part of the process of developing a historic context for the SEWRF, Dudek conducted background research on the Cardiff-by-the-Sea community, including the history of development, the rise of important industries, and important individuals and events that helped shape the future. Dudek also conducted archival and building development research on the properties located at 2695 Manchester Avenue to develop a site-specific history for the project area. This research involved requesting original as-built plans of the buildings from SEJPA, which were provided to Dudek on January 12, 2016. The reviewed plans are as follows:

- 1964 SEWRF Original Construction Plans
- 1981 Enlargement and Upgrading Plans
- 1989 Plant Upgrading Plans
- 1991 Plant Upgrades and Additions Plans
- 1994 Plant Modification Plans
- 1999 Upgrade Plans

Dudek also conducted archival research on all individuals and architectural and engineering firms that were revealed during building development research. Such research was conducted through repositories such as the San Diego Public Library, San Diego History Center, and Ancestry.com.

Tribal Correspondence

Dudek requested a Native American Heritage Commission (NAHC) search of its Sacred Lands File (SLF) on December 17, 2015, for the proposed project area. The NAHC has yet to provide the results of this search. From a due diligence perspective, it is preferred to have the results of the NAHC Sacred Lands File search; however, this search is not required under CEQA. Results will be included once received, however the absence of this information does not present any specific constraints to current cultural resources analysis.

Pedestrian Survey

Dudek Archaeologist Angela Pham, MA, RPA conducted an intensive pedestrian cultural survey of the of the project area on December 21, 2015. No archaeological resources were identified during the pedestrian survey. Four historic built-environment resources were identified during the survey. The built-environment resources consist of the Control Building (currently Office Building), the Chlorination Building (Generator Building), the Primary Digester (Digester 1) and the Secondary Digester (Digester 2), which were evaluated under CEQA and Section 106 of National Historic Preservation Act (NHPA) regulations to determine their significance.

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

Less Than Significant Impact. No previously recorded historic built-environment resources have been identified within the APE. During the pedestrian survey, four historic built-environment resources were identified during the survey. The resources consist of the Control Building; the Chlorination Building (Generator Building); and the Primary and Secondary Digesters (Digesters 1 and 2). The built-environment resources are part of the proposed SEWRF upgrades that would result from development of the proposed project. The operations facility would receive a seismic roof to wall connections retrofit and a SCADA system. The chlorination building would receive a seismic roof to wall connections retrofit and electrical upgrades (switchboard and the odor control panel in the headworks would be replaced). Digester 1 and 2 improvements include the replacement of sludge circulation pumps Nos. 2, 3, and 5, and heat exchangers. Digester 2 further requires the replacement of its floating cover and any repairs on the concrete and lining of the structure. The resources were evaluated for National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR) historic resource designation in consideration of all applicable criteria and integrity requirements. NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have

made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to PRC Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

As fully detailed in Appendix C of this MND, as a result of the evaluation, the properties were found not eligible under all state and national eligibility criteria due to lack of

significant historical associations and compromised integrity. Therefore, the Control Building (current Office Building), the Chlorination Building (Generator Building), Primary Digester (Digester 1), and Secondary Digester (Digester 2) are not considered historical resources under CEQA or a historic property under Section 106 of the NHPA. Impacts would be less than significant.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact With Mitigation Incorporated. No previously recorded archaeological resources have been identified within the APE. An intensive pedestrian survey was conducted of the project area on December 21, 2015, by Dudek Archaeologist Angela Pham. No archaeological artifacts or resources were observed. The APE is fully developed with associated landscaping, asphalt, and stormwater drainage facilities. Landscaping (grass and trees) was observed at the proposed administration building location and the southwestern portion of the proposed solar field location site. The northern and eastern proposed solar fields are located in previously disturbed areas. Development and vegetative ground cover was present throughout the APE, restricting direct visibility of the ground surface in a number of areas. Based on the general topographic suitability for this area to support archaeological resources, and considering the moderate density of prehistoric and historic-era resources in the surrounding vicinity and the presence of historic built-environment resources in the project area, it is possible that unidentified archaeological resources may still be present in the APE.

Despite the lack of archaeological sites identified during the review of previous studies and pedestrian survey, the potential to encounter unknown cultural resources during ground disturbing activities remains in select areas of the APE. This includes the proposed administration building and solar fields (and associated infrastructure) that require initial disturbance of subsurface soils in locations where no previous cultural resource studies (i.e., monitoring/excavation) have been conducted and where undisturbed native sediments may be present. Therefore, impacts would be potentially significant. However, with the incorporation of mitigation measure MM-CUL-1, which requires cultural resource construction monitoring during ground disturbing activities at these specific sites, impacts would be reduced to a level below significance.

Mitigation Measures

MM-CUL-1 Prior to initiation of ground disturbing activities for the construction of the administration building and solar fields (and associated infrastructure), a

qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, shall be retained to monitor and recognize potential archaeological discoveries. In the event that archaeological resources are exposed during construction, work in the immediate vicinity of the find shall be halted or directed to another location until the qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas, but shall be redirected a safe distance from the find. If the new discovery is evaluated and found to be significant under CEQA or Section 106 of the NHPA and avoidance is not feasible, additional work such as data recovery may be warranted. The qualified archaeologist shall be present at all times during ground disturbing activities associated with the proposed administration building and the solar fields.

c) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant With Mitigation Incorporated. The project is has been extensively developed and likely immediately underlain by artificial fill materials. However, the extent of the excavation for the administration building and solar fields is not yet finalized at this time. There is potential to encounter unknown paleontological resources during ground disturbing activities for the proposed administration building and solar fields (and associated infrastructure) that require initial disturbance of subsurface soils where undisturbed native sediments may be present. Therefore, impacts would be potentially significant. However, with the incorporation of mitigation measure MM-CUL-2, which requires paleontological resource construction monitoring during ground disturbing activities at these specific sites, impacts would be reduced to a level below significance.

Mitigation Measures

MM-CUL-2 Prior to initiation of ground disturbing activities for the construction of the administration building and solar fields (and associated infrastructure), a qualified paleontologist shall be retained to monitor and recognize potential paleontological discoveries. In the event that paleontological resources are exposed during construction, work in the immediate vicinity of the find shall be halted or directed to another location until the qualified paleontologist can evaluate the significance of the find. Construction activities may continue in other areas, but shall be redirected a safe distance from the find. The qualified paleontologist shall be present at all

times during ground disturbing activities associated with the proposed administration building and the solar fields.

d) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. The discovery of human remains is always a possibility during ground disturbances. Should any human remains be encountered during ground disturbing activities, the project would comply with the State of California Health and Safety Code Section 7050.5. As required by Health and Safety Code Section 7050.5, no further disturbance shall occur in areas that could contain human remains until the San Diego County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. The requirements of PRC Section 5097.98 state that the County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC within 24 hours. The NAHC will then determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with existing regulations for proper protocol of inadvertent discovery of human remains would ensure that impacts would be less than significant.

3.6 Geology and Soils

a) Would the project 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.

Less Than Significant Impact. The project site is located within seismically active Southern California, an area where several faults and fault zones are considered active by the California Division of Mines and Geology. Alquist-Priolo earthquake fault zones have been established for the majority of these faults and fault zones. The purpose of the Alquist-Priolo earthquake fault zones is to prohibit the location of structures on the traces of active faults, thereby mitigating potential damage due to fault surface rupture. According to the

California Department of Conservation (DOC), the project site and the entire City of Encinitas are not listed as being affected by an Alquist-Priolo earthquake fault zone (DOC 2015b). Although the project site is not associated with an Alquist-Priolo earthquake fault zone, proposed project components include a seismic roof to wall connections retrofit for the operations building, cogeneration building, and chlorine to further ensure safety. Impacts would be less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. As previously stated, the project site is located in seismically active Southern California, and thus would likely be subject to strong ground motion from seismic activity similar to that of the rest of the San Diego County due to the seismic activity of the region and proximity to the Newport-Inglewood-Rose Canyon Fault Zone. However, compliance with the most recent California Building Code, and any project specific geotechnical recommendations for minimizing seismic hazard, the project would not expose people or structures to potential substantial adverse effects from seismic ground shaking. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. According to the California Department of Conservation Regulatory Maps, the project site, located within the Encinitas Quadrangle is not within an area where there is historic occurrence of liquefaction or potential for liquefaction to occur (DOC 2015b). Additionally, all proposed improvements would be located within the developed SEWRF site. Therefore, impacts would be less than significant.

iv) Landslides?

Less Than Significant Impact. Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. According to the California Department of Conservation Seismic Hazard Zones Maps for the Encinitas Quadrangle (DOC 1986), the project site is located in landslide susceptibility Area 1, which is considered an area least susceptible to landslides and slope instability. Although the project site is located downhill of land designated as Area 2 (marginally susceptible area) to the west, and immediately east of land designated Area 3 (Generally susceptible area), there is no known occurrence of

seismically induced landslides within or surrounding the project area. Additionally, the existing SEWRF is built-out and generally flat. Proposed construction on-site is not expected to create unstable slopes, and therefore, impacts would be less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. All areas of construction would occur within the SEWRF which is comprised of previously disturbed and developed land. Excavation would occur during construction of the pipelines. Soils underlying hardscape land covers and landscaped areas would be temporarily exposed, and soil erosion and loss of topsoil could occur through the transport of these materials through runoff, wind transport, and vehicle movement. The project would be required to complete a stormwater pollution prevention plan (SWPPP) in accordance with the Statewide Construction General Permit. This requires implementation of water quality BMPs to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, fertilizer and pesticide application restrictions, litter control and pick up, and vehicle and equipment repair and maintenance in designated areas.

Upon completion of construction, the land disturbed by construction would be returned to existing conditions similar to existing conditions. Implementation of SWPPP requirements would reduce the potential for substantial soil erosion, and impacts would be less than significant.

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. As previously stated, the proposed project would be within the developed SEWRF, which has no historic occurrence of landslides or liquefaction. Due to similar existing structures and developed condition of the area, the proposed project would not be characterized as having the potential to result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Therefore, impacts would be less than significant.

d) Would the project 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?

Less Than Significant Impact. Expansive soils have a significant amount of clay particles which can shrink and swell with water, exerting stress on infrastructure within or above the surface. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed and can be found in hillside areas and low-lying alluvial basins. The proposed SEWRF upgrades would be placed in areas where there are existing facilities suitable for supporting the proposed infrastructure. Additionally, there is no known occurrence or identification of expansive soils within the project site. Therefore, impacts would be less than significant.

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 proposed project does not include septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

3.7 Greenhouse Gas Emissions

This section is based, in part, on greenhouse gas (GHG) emissions modeling conducted by Dudek, included as Appendix A to this MND.

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

Less Than Significant Impact.

Construction

GHG emissions would be associated with the construction phase of the proposed project through use of construction equipment and vehicle trips. Emissions of CO_2 were estimated using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, available online (www.caleemod.com). Construction is anticipated to begin in January 2017 and would take approximately 17 months to complete.

A detailed depiction of the construction schedule—including information regarding subphases and equipment assumed for each subphase—is included in Appendix A of this report.

Table 3.7-1, Estimated Annual Construction GHG Emissions, shows the estimated annual GHG construction emissions associated with the proposed upgrades and the annualized construction emissions over a 20-year period per County guidance.

Table 3.7-1
Estimated Construction GHG Emissions (total metric tons)

Construction Year	CO_2	CH_4	N_2O	CO_2E Emissions
Construction in 2017	196.7	0.03	0.00	197.42
Construction in 2018	15.78	0.01	0.00	15.83
			Total Construction	**213.25**
			Amortized Construction Emissions	10.66

Source: See Appendix A for complete results.
CO_2 = carbon dioxide; CH_4 =methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

Operation

The wastewater treatment equipment at the SEWRF operates using electricity from the grid. The generation of electricity through combustion of fossil fuels typically results in emissions of carbon dioxide (CO_2) and, to a smaller extent, methane (CH_4) and nitrous oxide (N_2O). The proposed project would involve replacement of older, less efficient equipment in the SEWRF wastewater treatment process with newer, more efficient equipment. Therefore, the wastewater treatment process would operate in a similar or more efficient manner and would emit fewer GHGs.

The proposed project would also include construction of an administrative building that would emit operational GHGs from area heating, water, and wastewater use, as well as from electricity use. Additionally, the proposed project would create a solar panel field that would emit operational GHGs from maintenance and cleaning of the solar panels. Table 3.7-2, Annual Estimated Operational GHG Emissions, shows the GHG emissions estimated to occur upon operation of the new administrative building and solar panels as well as the total annual GHG operational and amortized construction emissions in accordance with the County of San Diego guidance.

Table 3.7-2
Annual Estimated Operational GHG Emissions (total metric tons)

Construction Year	CO_2	CH_4	N_2O	CO_2E Emissions
Total Operational	92.73	0.22	0.01	98.05
Amortized Construction Emissions				*10.66*
Total Annual Operational and Amortized Construction Emissions				***108.71***

Source: See Appendix A for complete results.
CO_2 = carbon dioxide; CH_4 =methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

As shown above, operation of the administrative building and solar panels would result in 98.05 metric tons of carbon dioxide equivalent (MT CO_2E) per year. However, operation of the solar panels is expected to offset the proposed project's GHG emissions by replacing GHG emissions that would have otherwise occurred from electricity generation. The proposed project would be provided electricity from the electrical grid, within the San Diego Gas & Electric (SDG&E) service area. Although the proposed project is anticipated to begin operation in a later year, the 2014 SDG&E carbon intensity factor for electrical generation of 626.11 pounds of CO_2E per megawatt was conservatively used in determining the estimated annual GHG emissions from the proposed upgrades (SDG&E 2015). As such, the solar panels are expected to offset approximately 0.09 MT CO_2E per year.

After accounting for the offset of GHG emissions from the project project's solar panels, the operational emissions from the proposed project would not exceed the County's 900 MT CO_2E per year screening threshold and would have a less than significant impact from GHG emissions.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The proposed project would be subject to the City of Encinitas' adopted Climate Action Plan (CAP). In addition to the City's CAP, the Scoping Plan, approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the amendments to the CEQA Guidelines, the California Natural Resources Agency observed that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the

strategies identified in the Scoping Plan" (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. The proposed upgrades will comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Executive Order B-30-15 established a statewide emissions reduction target of 40% below 1990 levels by 2030. This interim measure was identified to keep the State on a trajectory needed to meet the 2050 goal of reducing GHG emissions to 80% below 1990 levels by 2050 pursuant to Executive Order S-3-05. CARB has already identified the target 2050 emission levels of 431 MMT CO_2E. Executive Order B-30-15 instructs CARB to similarly express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (see First Update to Scoping Plan, p. ES2). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan (CARB 2014, page 34) states:

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts [MW] of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes the state is on a trajectory to meet the 2020, 2030, and 2050 GHG reduction targets set forth in AB 32, Executive Order B-30-15 and Executive Order S-3-05. The proposed project would not interfere with implementation of any of

the above-described GHG reduction goals for 2030 or 2050. The proposed upgrades would support achievement of the near-term 2020 goal (as codified in AB 32), the interim 2030 goal, and the long-term 2050 goal through continuing to provide a domestic water source for the region.

As discussed above, construction of the proposed project would not exceed the County of San Diego's screening threshold of 900 MT CO_2E per year or cause the proposed project's pro-rated emissions to exceed the screening threshold. Furthermore, the proposed project would not exceed the County's screening threshold and therefore the proposed project would not conflict with Executive Order S-3-05's GHG reduction goals for the State of California.

At the regional level, SANDAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) has been adopted for reducing GHG emissions attributable to passenger vehicles in the San Diego region. Although the RTP/SCS does not regulate land use or supersede the exercise of land use authority by SANDAG's member jurisdictions (i.e., the County of San Diego and cities therein), the RTP/SCS is a relevant regional reference document for purposes of evaluating the intersection of land use and transportation patterns, and the corresponding GHG emissions. The RTP/SCS is not directly applicable to the proposed project because the underlying purpose of the RTP/SCS is to provide direction and guidance on future regional growth (i.e., the location of new residential and non-residential land uses) and transportation patterns throughout San Diego County as stipulated under SB 375. The proposed project would be consistent with existing zoning and land use designations and would not increase vehicle trips or land use intensities as provided in the RTP/SCS. Therefore, the proposed project would not conflict with the intent of the RTP/SCS.

As such, the proposed project would not generate GHG emissions in quantities such that its implementation would conflict with the goals of AB-32, the City's CAP, or General Plan. Therefore, impacts would be less than significant.

3.8 Hazards and Hazardous Materials

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The proposed project would involve the transport of fuels, lubricants, and various other liquids needed for operation of construction equipment at the site via service trucks. Workers would likely commute to the project site

via private vehicles, and would operate construction vehicles/equipment within the SEWRF. Materials hazardous to humans, wildlife, and sensitive environments would be present during construction of the proposed project. These materials include fuels, equipment fluids, cleaning solutions and solvents, and lubricants.

Direct impacts to human health and biological resources from accidental spills of small amounts of hazardous materials from construction equipment during construction would potentially occur. However, compliance with federal, state, and local regulations including the California Division of Occupational Safety and Health (CalOSHA), California Accidental Release Prevention (CalARP) Program, the Hazardous Material Management Act and Hazardous Waste Control Act that provide safety and control measures for those materials handled on site would ensure that potentially significant impacts would not occur. Additionally, storage and handling of these materials and construction staging areas would be limited to the SEWRF site. During the construction period, standard BMPs would be applied, such as those required by the SWPPP, to ensure that all hazardous materials (e.g., construction equipment fuels) are stored properly and that no hazards occur during this phase of the project, in compliance with applicable regulations.

Although operation of the proposed facility upgrades and replacements are not generally associated with the use of hazardous materials, hazardous materials such as oils, lubricants, and other materials related to equipment operation may be periodically required during project operation to ensure proper system functionality. As with construction, hazardous materials handling during the operation of the proposed project would comply with the applicable federal, state, and local regulations that ensure safe use, handling, transport, storage, and disposal of hazardous materials. Therefore, implementation of the proposed project would not create a substantial hazard to the public or the environment, and impacts would be less than significant.

b) Would the project 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?

Less Than Significant Impact. Construction of the proposed project would increase the potential for release of hazardous materials into the environment. However, the project site is developed with the existing SEWRF, and there is no known evidence of hazardous materials or hazardous materials release(s) onto or from the proposed project site (DTSC 2007).

The quantities of potential hazardous materials would not be substantial and would not pose a health risk to surrounding residents or the adjacent San Elijo Lagoon. Hazardous materials used during construction and operation of the proposed project would be subject to applicable local, state, and federal regulations which are intended to minimize risk of hazards and hazardous materials release. In addition, the proposed project site is not listed within any Cortese list databases; therefore, it is not expected that construction activities would result in the release of hazardous materials associated with contaminated soils, or underground tanks. Therefore, the proposed project would not result in conditions leading to any reasonably foreseeable upset or accident involving the release of hazardous materials. Impacts would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. No schools exist within one-quarter mile of the proposed project. As such, no impact would occur.

d) Would the project be located on a site that 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?

Less Than Significant Impact. The project site is not found on any list of hazardous materials sites, including the California Department of Toxic Substances Control (DTSC) Cortese List (DTSC 2007), and therefore would not create a significant hazard to the public or the environment. Furthermore, the project site is not on the list of leaking underground storage tank sites from Water Board GeoTracker database (State of California 2015); the list of solid waste disposal sites (California EPA 2015); nor the list of "active" Cease and Desist Orders and Cleanup and Abatement Orders from Water Board (California EPA 2015). Impacts would be less than significant.

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 closest airport to the project site is McClellan Palomar Airport in Carlsbad located approximately 7.6 miles north, and the project site is not located within the McClellan Palomar Airport Land Use Plan. There are no airports within two miles of the project site, and therefore implementation of the proposed project

would not result in a safety hazard for people residing or working in the project area. No impact would occur.

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. No private airstrips are located within two miles of the proposed project area. Therefore, no impact would occur.

g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The proposed project does not include the development of any land uses or structures that may impede emergency access or movement during an emergency or evacuation. All construction and operation related to the proposed project would be contained within the SEWRF, and would not affect accessibility along surrounding roadways. Therefore, impacts would be less than significant.

h) Would the project 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?

Less Than Significant Impact. The project site is located within an urbanized area, and immediately north of the San Elijo Lagoon. The project site does not contain and is not adjacent to wildlands where there is risk for wildfire. Therefore, impacts would be less than significant.

3.9 Hydrology and Water Quality

a) Would the project violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. The proposed project is located within the San Diego Regional Water Quality Control Board (RWQCB) jurisdiction that oversees water quality in the San Diego region. The RWQCB has adopted the Water Quality Control Plan for the San Diego Basin (Basin Plan) that designates beneficial uses of the region's surface water and groundwater, identifies water quality objectives for the reasonable protection of those uses, and establishes an implementation plan to achieve the objectives. The RWQCB also regulates discharges from municipal separate storm sewer systems in the San Diego region under a National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit (Regional MS4 Permit), which was most recently amended on February 11, 2015. The permit requires the development and implementation of best management practices (BMPs) in planning and construction of private and public development projects.

Development projects are also required to include BMPs to reduce pollutant discharges from the project site in the permanent design.

Construction of the proposed project would involve ground-disturbing activities for grading and excavation that could result in sediment discharge in stormwater runoff. Additionally, construction would involve the use of oil, lubricants, and other chemicals that could be discharged from leaks or accidental spills. These potential sediment and chemical discharges during construction would have the potential to impact water quality in receiving water bodies. However, construction of the proposed project would likely result in more than one acre of land disturbance and therefore, the proposed project would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the Statewide Construction General Permit. This requires implementation of water quality BMPs to ensure that water quality standards are met, and that stormwater runoff from the construction work areas do not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, fertilizer and pesticide application restrictions, litter control and pick up, and vehicle and equipment repair and maintenance in designated areas. Implementation of SWPPP requirements would reduce potentially hydrology and water quality impacts to less than significant.

During operation of the proposed project, the SEWRF would continue to discharge secondary-treated wastewater to the Pacific Ocean via the San Elijo Ocean Outfall in compliance with their NPDES permit (No. CA0107999). Although this NPDES permit expired on October 27, 2015, it was administratively extended to allow the SEWRF to continue discharging the treated wastewater via the San Elijo Ocean Outfall (RWQCB 2015). The proposed project would replace older equipment at the SEWRF and would maintain or increase the water quality of the wastewater discharge during operations. The requirements of the NPDES permit for this discharge, including monthly reporting of discharge water quality, would ensure that the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, impacts would be less than significant.

b) Would the project 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 (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The proposed project receives water from the San Dieguito Water District (SDWD) and does not use groundwater as a water supply. The

proposed project would convert areas of the project site from being a pervious land cover to an impervious land cover. The additional areas of impervious land cover would result in less stormwater infiltration in these specific locations; however, the reduction in groundwater recharge due to the increase in impervious surfaces would not be substantial. As such, the proposed project would not significantly change groundwater quantities or result in substantial losses to groundwater recharge capability, and impacts would be less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Stormwater on the project site drains via overland flow, west to the cement channel that traverses the project boundary and eventually discharges into the San Elijo Lagoon. A portion of the proposed project would replace existing wastewater treatment equipment that would not create a new impervious footprint that would substantially alter the existing drainage pattern. The proposed project would also construct a new administrative buildings and solar field, which would introduce new impervious surfaces that would change the drainage patter of the site. However, the proposed project would be required to prepare a SWPPP and implement stormwater BMPs that would maintain the existing level of runoff from the project site and would reduce sediment and pollutant runoff. The proposed project would not alter the concrete channel or major drainages in proximity to the project site that would result in substantial erosion or siltation. Therefore, impacts from erosion and siltation would be less than significant.

d) Would the project 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?

Less Than Significant Impact. As previously stated, stormwater on the project site drains via overland flow, west to the cement channel that traverses the project boundary and discharges into the San Elijo Lagoon. A portion of the proposed project would replace existing wastewater treatment equipment that would not create a new impervious footprint that would substantially alter the existing drainage pattern. Another part of the proposed project would construct a new administrative buildings and solar field, which would introduce new impervious surfaces that would change the drainage pattern of the site. Although the proposed project would develop the site with new impervious surfaces

and hardscape areas, the proposed project would be required to implement pertinent regulations and conditions such as the WQCP for the San Diego Basin and the MS4 permit. These would require BMPs to reduce stormwater flow from the project site, which could result in flooding on or off site. Impacts related to flooding would be less than significant.

e) Would the project 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?

Less Than Significant Impact. As previously stated, stormwater on the project site drains via overland flow, west to the cement channel that traverses the project boundary and discharges into the San Elijo Lagoon. The proposed project would not result in a substantial increase in stormwater flows that would exceed the capacity of the cement drainage channel. The proposed project would also be required to comply with applicable regulations such as the WQCP for the San Diego Basin and the MS4 permit, which would require BMPs to reduce stormwater flow and pollutants from the project site. Therefore, impacts would be less than significant.

f) Would the project otherwise substantially degrade water quality?

Less Than Significant Impact. As previously described, the proposed project would be required to implement pertinent regulations and conditions such as the WQCP for the San Diego Basin and the MS4 permit. These include preparing a SWPPP with BMPs to reduce pollutant discharge from stormwater runoff. Therefore, the proposed project would not substantially degrade water quality and impacts would be less than significant.

g) Would the project 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?

No Impact. The proposed project would not involve the creation of any housing and is not located within a 100-year flood hazard area (FEMA 2012). Therefore, no impacts from placing housing within a 100-year flood hazard area would result.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The proposed project would not include any structures within a 100-year flood hazard area that could impede or redirect flows (FEMA 2012). As such, no impacts result from implementation of the proposed project.

i) Would the project 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?

No Impact. The proposed project is not located in an area that would have the potential to be flooded as a result failure of a levee or dam. As previously stated, the proposed project is also not within a 100-year flood hazard area (FEMA 2012). Therefore, no impacts from the potential to expose people or structures to flooding would occur.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project is not located within a tsunami inundation zone and is not located downslope of any large bodies of water that could adversely affect the site in an event of earthquake-induced failures or seiches or wave oscillations in an enclosed or semi-enclosed body of water. The proposed project would not exacerbate mudflow potential because the extent of construction would not alter any existing hillsides. Therefore, implementation of the proposed project would result in no impacts from seiche, tsunami, or mudflow.

3.10 Land Use and Planning

a) Would the project physically divide an established community?

No Impact. All facility upgrades would occur within the existing SEWRF site. The project site is surrounded by existing residential development to the north, west, and southeast. I-5 is located immediately to the west of the project site, and the San Elijo Lagoon is located to the south across Manchester Avenue. The existing facilities are separated from surrounding development by extensive existing landscape that consists of shrubs and trees. Proposed SEWRF facility upgrades would not divide the community and no impact would occur.

b) Would the project 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?

No Impact. As previously described, SEJPA completed the 2015 Facility Plan for the SEJPA's SEWRF to update the condition assessments and identify necessary component replacement or rehabilitation. The condition assessment of the 2015 Facility Plan recommends that multiple components of the SEWRF be upgraded based on a combination of factors such as risk, safety, physical condition, code compliance, potential for improving process efficiency, reducing labor, and improving energy efficiency. No amendments are proposed as a result of the project, and the proposed land uses and repairs would comply with the underlying zoning. Therefore, no impact would occur.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. Refer to response 3.4(f). The proposed project would not directly impact the adjacent Hardline FPA, nor would it preclude the HOA from managing and maintaining the area as open space. Thus, the proposed project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP and no impact would occur.

3.11 Mineral Resources

a) Would the project 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?

No Impact. The project site is located on land classified as Mineral Resource Zone 3 (MRZ-3), which includes areas containing mineral deposits, the significance of which cannot be evaluated from available data (DOC 1982). The project site is not currently, and never has been a part of a mineral extraction operation. Due to the existing development within the SEWRF, sensitive noise receptors of the surrounding residential development and the adjacent San Elijo Lagoon, mineral resource extraction on site would be incompatible with the site's current zoning and surrounding land uses. Proposed SEWRF facility upgrades would not result in the loss of known mineral resources, and no impact would occur.

b) Would the project 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. See response 3.11(a). The existing SEWRF facility is developed and no known locally important mineral resources exist on-site. Mining operations are not anticipated on the project site, and no impact would occur.

3.12 Noise

This section is based, in part, on ambient noise monitoring and modeling conducted by Dudek and is included as Appendix D to this MND. Ambient noise measurements were conducted at various locations adjacent to the project site to characterize the existing noise environment. The noise measurements were conducted on December 15, 2015, between 1 p.m. and 4 p.m. Short-term (1 hour or less), attended sound-level measurements were taken with a Rion NL-52 sound level meter. The sound-level meter meets the current American National Standards Institute standard for a Type 1 precision sound-level meter. The sound-level meter was positioned at a height of approximately 5 feet above the ground. The measured daytime average sound levels ranged from 49 to 59 A-weighted decibels (dBA), as shown in Table 3.12-1. The measurement results are presented in terms of the time-averaged sound level (L_{eq}) and the maximum (L_{max}) and minimum (L_{min}) noise levels during the measurements.

Table 3.12-1
Ambient Measured Noise Levels

Site	Location	Energy-Averaged Sound Level (dBA L_{eq})	Maximum Sound Level (dBA L_{max})	Minimum Sound Level (dBA L_{min})	Noise Sources
M1	Single-family residential to the northwest of project; 2398 Cambridge Avenue	59.4	61.9	56.4	Traffic noise (I-5), rustling leaves
M2	Single-family residential to the west of project; 2600 Montgomery Avenue	58.9	66.4	54.8	Traffic noise (I-5), birds, low hum from wastewater treatment plant
M3	Multifamily residential to the south of project; MacKinnon Ranch Road	49.4	55.8	46.5	Traffic noise (I-5), birds, low hum from wastewater treatment plant
M4	Multifamily residential to the north of project; Carol View Drive	57.6	65.4	54.2	Traffic noise (I-5), birds

Source: Appendix D

The project site is adjacent to multi-family residential land uses zoned as R-11. The City of Encinitas Municipal Code regulates potential noise impacts as they relate to the proposed project. The City's Municipal Code Chapter 30.40 (Performance Standards) limits noise from stationary noise sources. The exterior noise standard for residential properties with zoning designations R-11, RS-11, R-15, R-20, R-25, MHP is 55 dBA during daytime hours (7 a.m. to 10 p.m.) or 50 dBA during nighttime hours (10 p.m. to 7 a.m.). Section 9.32.410 regulates noise from construction equipment. Operation of construction equipment is prohibited on Sundays, federal, state or city holidays, and between 7 p.m. and 7 a.m. on weekdays and Saturdays. Additionally, the City's construction ordinance prohibits construction noise levels in excess of 75 decibels for more than eight hours during any 24-hour period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes (City of Encinitas 2015).

a) Would the project result in 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?

Less Than Significant Impact.

Construction

Noise would be produced during the construction phase of the proposed project. Construction activities would occur Monday through Friday, between 7 a.m. and 7 p.m., in accordance with the City's Municipal Code.

Project construction would temporarily increase noise levels at residences and other noise-sensitive locations near the project site. The magnitude of the increases would depend on the type of construction activity, the noise level generated by various pieces of construction equipment, site geometry (i.e., shielding from intervening terrain or other structures), and the distance between the noise source and receiver.

Construction noise and vibration are temporary phenomena. Construction noise and vibration levels vary from hour-to-hour and day-to-day, depending on the equipment in use, the operations being performed, and the distance between the source and receptor.

The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 3.12-2. The noise values represent maximum noise generation, or full-power operation of the equipment. As one increases the distance between equipment, or separation of areas with simultaneous construction activity,

dispersion and distance attenuation reduce the effects of separate noise sources added together. Construction noise in a well-defined area typically attenuates at approximately 6 dB per doubling of distance. When the sites have an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, an excess ground attenuation value of 1.5 dB per doubling distance can be assumed (Caltrans 2009). Also, typical operating cycles may involve 2 minutes of full power operation, followed by 3 or 4 minutes at lower levels. The average noise level during construction activities is generally lower, since maximum noise generation may only occur up to 50% of the time.

Table 3.12-2
Construction Equipment Noise Levels

Equipment Type	Typical Noise Level dB(A) at 50 feet
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Truck	88

Source: FTA 2006

The Federal Highway Administration's Roadway Construction Noise Model (RCNM) (FHWA 2006) and project-specific construction equipment were used to estimate construction noise levels at the nearest noise-sensitive land uses (NSLUs).

Input variables for RCNM consist of the receiver/land use types, the equipment type and number of each (e.g., two excavators, a loader, a dump truck), the duty cycle for

each piece of equipment (i.e., percentage of hours the equipment typically works per day), and the distance from the sensitive noise receptor. The RCNM has default duty cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty cycle values were used for this analysis.

NSLUs in the form of residences exist to the north, south and west of the project site. The nearest NSLUs adjacent to proposed construction are residences to the west, approximately 200 feet from the nearest construction areas. Using the provided construction information, the RCNM construction noise model was used to predict noise from on-site construction activities during the major phases of the proposed project that constitute the overall project. The results are summarized in Table 3.12-3 (see Appendix D for compete results). Predicted 1-hour construction noise levels range from approximately 65 dBA L_{eq} during SEJPA headworks upgrades to approximately 71 dBA L_{eq} during administration building construction. Construction noise levels would be less than 71 dBA L_{eq}, neglecting effects of terrain shielding which could also provide additional noise reduction. Therefore, the levels would not exceed the City of Encinitas construction noise standards. Construction noise would be a less than significant impact.

Table 3.12-3
Construction Noise Summary of Results (dBA L_{eq})

	SEJPA Headworks Upgrades Project	New Administration Building			SEWRF Improvements
Receiver	*Grit Bldg, Exc/Strcrl, Outdoor Equip Demo / Install*	*Site Mobilization*	*Bldg Structure*	*Bldg Envelope, Utilities*	*Demolition*
Nearest Residences approx. 200' from nearest construction	65	67	71	65	69

Source: Appendix D

Although construction noise impacts would be less than significant, the following construction noise reduction measures are recommended to further reduce potential annoyance or complaints from nearby residences, to the extent possible:

1. Construction should not occur between 7 p.m. and 7 a.m. Monday through Friday or at any time on weekends or federal holidays. The hours of construction, including

noisy maintenance activities and all spoils and material transport, should be restricted to the periods and days permitted by the local noise or other applicable ordinance.

2. All noise-producing project equipment and vehicles using internal-combustion engines are recommended to be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) are recommended to be equipped with shrouds and noise-control features that are readily available for that type of equipment.
3. All mobile or fixed noise-producing equipment used on the project that are regulated for noise output by a local, state, or federal agency should comply with such regulations while in the course of project activity.
4. Electrically powered equipment should be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
5. Material stockpiles and mobile equipment staging, parking, and maintenance areas should be located as far as practicable from noise-sensitive receptors.
6. The use of noise-producing signals, including horns, whistles, alarms, and bells, should be for safety warning purposes only.
7. No project-related public address or music system should be audible at any adjacent receptor.

Operation

Most of the proposed project consists of the replacement of aging mechanical equipment with newer, more efficient equipment. Typically, newer equipment also produces lower noise levels as a result of improved design, tighter mechanical tolerances and the need for less power. The capacity of the SEWRF would not increase as a result of the proposed project, and the number of staff required to operate the SEWRF would not increase. Therefore, noise resulting from operational traffic noise would not increase. Moreover, the project is required to adhere to the City of Encinitas noise ordinance with regard to noise levels produced at the property boundary of the adjacent land use. Operational noise levels from the current facility are relatively low and do not exceed City of Encinitas noise standards. Therefore, implementation of the proposed project would result in less than significant operational noise impacts.

b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Ground-borne vibration is a small, rapidly fluctuating motion transmitted through the ground which diminishes (attenuates) fairly rapidly over distance. Ground-borne vibration from heavy equipment operations during construction of the proposed project was evaluated and compared with relevant vibration impact criteria using the Federal Transit Administration's Transit Noise and Vibration Impact Assessment, which provides vibration impact criteria and recommended methodologies and guidance for assessment of vibration effects (FTA 2006).

At a distance of approximately 200 feet, the vibration level from heavy construction machinery (such as a large bulldozer) would be approximately 0.004 Peak Particle Velocity, in inches per second (PPV IPS). Vibration levels of this magnitude would not be perceptible at nearby residences, and would be well below the FTA threshold of potential damage for normal structures (0.20 PPV IPS). Therefore, short-term construction related vibration impacts would be less than significant.

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

Less Than Significant Impact. As discussed previously, implementation of the proposed project would result in the replacement of older mechanical equipment with new, more efficient equipment, which is also typically quieter. The project would not result in an increase in wastewater capacity, nor would the number of on-site employees increase (which would otherwise result in an increase in traffic noise). The project would therefore not result in a substantial permanent increase in ambient noise levels.

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

Less Than Significant Impact. Refer to response 3.12(a). Construction of the proposed project is anticipated to result in short-term noise levels from construction activities that would not exceed noise thresholds. Therefore, the project would not result in substantial temporary increases in noise levels and impacts would be less than significant.

e) Would the project be 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?

No Impact. The proposed project is located approximately 7.4 miles south of the nearest airport (McClellan-Palomar Airport), and is not located within an airport land use plan. The project would not expose people residing or working in the project area to excessive noise levels and no impact would occur.

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

No Impact. The proposed project is not located in the vicinity of a private airstrip. The project would not expose people residing or working in the project area to excessive noise levels and no impact would occur.

3.13 Population and Housing

a) Would the project 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)?

No Impact. The proposed project involves improvements to SEWRF facilities on-site. Regular maintenance activities within the SEWRF would continue generally unchanged from existing conditions, and the capacity and number of operational staff would not change as a result of the proposed project. Additionally, no housing is proposed as part of the project, and therefore would not directly or indirectly induce population growth. Therefore, no impact would occur.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would be located entirely within the SEWRF site, and would not displace any existing housing. No impact would occur.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. As previously stated, the proposed project would be located entirely within the SEWRF site, and would not displace any people. No impact would occur.

3.14 Public Services

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?

No Impact. The proposed project includes upgrades, rehabilitations, and replacements to the existing SEWRF, in which all construction would be completed on-site. The capacity and number of operational staff would not change as a result of the proposed project, and no housing is proposed as part of the project. Implementation of the proposed project would not directly or indirectly induce population growth, and such facility upgrades would not result in an increased demand for fire protection services. Therefore, no impact associated with fire protection would occur.

Police protection?

No Impact. The proposed project includes upgrades, rehabilitations, and replacements to the existing SEWRF. The capacity and number of operational staff would not change as a result of the proposed project, and no housing is proposed as part of the project. Implementation of the proposed project would not directly or indirectly induce population growth, and such facility upgrades would not result in an increased demand for police protection services. Therefore, no impact associated with police protection would occur.

Schools?

No Impact. As previously stated, the proposed project does not include housing, and therefore would not directly or indirectly result in an increase in population. The proposed project would not introduce a new student population, and therefore would not result in an increased demand for school facilities. Therefore, no impact would occur.

Parks?

No Impact. The proposed project would not directly, or indirectly result in an increase in population and therefore would not result in an increase in demand for parks. Construction of proposed facilities would be on-site and would not temporarily or

permanently disturb existing parks, including the adjacent San Elijo Lagoon Trail. Therefore, no impact to parks as a result of the proposed project would occur.

Other public facilities?

No Impact. As discussed above under schools and parks, given the lack of population expansion and/or the lack of physical expansion of new facilities to the SEWRF, impacts to other public facilities would not occur. Construction of proposed facilities would not impede or decrease the service availability of any surrounding libraries, as the closest public library is Cardiff-by-the-Sea Branch Library located approximately 0.6 miles northwest. Therefore, no impact would occur.

3.15 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?

No Impact. The proposed project would not result in the development of housing. Improvements to the SEWRF would solely support the existing uses, and the capacity and number of operational staff would not change as a result of the proposed project. Therefore, the proposed project would not directly, or indirectly introduce a new population that would result in an increase in the use of any existing parks. No impact would occur.

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?

No Impact. The proposed project does not include the development of recreational facilities. Therefore, no impact would occur.

3.16 Transportation and Traffic

a) Would the project 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?

Less Than Significant Impact. The majority of traffic impacts would be limited to temporary construction impacts due to associated construction vehicles entering and exiting SEWRF from Manchester Avenue. Potential equipment required for construction of the proposed project would include medium sized excavation and earth moving equipment, dump trucks, cement mixers, and portable welders. Construction equipment would be staged on-site and not within any surrounding roadway. All construction would be completed within the SEWRF, and transport to and from the project site would avoid peak traffic hours as feasible to avoid substantial congestion on Manchester Avenue. Additionally, the capacity and number of operational staff would not change as a result of the proposed project, thus, operational staff vehicle numbers would not increase. Implementation of the proposed project would not conflict with an applicable plan, ordinance or policy related to the performance of the surrounding circulation system. Impacts would be less than significant.

b) Would the project 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?

Less Than Significant Impact. As stated in 3.16a above, potential traffic impacts would be limited to the temporary construction phase, which would be phased over several years. Proposed construction related vehicles planned for use are considered minimal and would not substantially increase roadway demand or result in a decline of existing level of service as the construction staging area and project related parking is within the SEWRF. Therefore, impacts would be less than significant.

c) Would the project 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. The proposed project location is not located within two miles of a public or private airstrip and is not within an airport land use plan. Therefore, no impact would occur.

d) Would the project 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 proposed project includes upgrades and replacements to existing SEWRF facilities, and does not include any roadway designs or alterations to existing roadways that would otherwise potentially increase traffic hazards. Therefore, no impact would occur.

e) Would the project result in inadequate emergency access?

Less Than Significant Impact. See response to 3.16a above. Construction impacts would be temporary, and construction and staging areas would not directly interfere with access to/from Manchester Avenue, that would otherwise impede emergency response.

Normal operation of the proposed project would not create any structural obstruction of emergency access routes. Occasional maintenance would be necessary throughout the proposed project's lifetime, but would be temporary and likely limited to few maintenance vehicles staged on-site. Therefore, impacts related to emergency access would be less than significant.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. See response to 3.16a. Construction of the proposed project would be temporary and would not affect public transit. Proposed construction and construction vehicles would be staged within the SEWRF, and would not require re-routing of existing public transit, bicycle, or pedestrian facilities.

Normal operation of the proposed project would be completely within the SEWRF and would not create any structural obstruction of public transit, bicycle, or pedestrian facilities. Implementation of the proposed project would not conflict with adopted

policies, plans, or programs, nor would the project decrease the performance or safety of existing public circulation facilities. Therefore, impacts would be less than significant.

3.17 Utilities and Service Systems

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. During operation of the proposed project, the SEWRF would continue to discharge secondary-treated wastewater to the Pacific Ocean via the San Elijo Ocean Outfall in compliance with their NPDES permit (No. CA0107999). Although this NPDES permit expired on October 27, 2015, it was administratively extended to allow the SEWRF to continue discharging the treated wastewater via the San Elijo Ocean Outfall (RWQCB 2015). The proposed project involves repairs, rehabilitation, and replacement of components of the SEWRF, which would improve the efficiency and function of the treatment process. The treatment process of wastewater at SEWRF would not be substantially altered by the proposed project. The project would not increase SEWRF capacity or operational staffing. Therefore, it would not increase wastewater generation, resulting in an exceedance of wastewater treatment requirements of the RWQCB, and there would be no impact.

b) Would the project 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?

Less Than Significant With Mitigation Incorporated. The proposed project would not result in a development that would substantially increase the demand for water or wastewater services such as new commercial or residential land uses. During construction, water usage would be temporary and minimal for watering the site and other needs. Construction water would be supplied by on-site recycled water. During operation, SEWRF capacity and operational staffing would not increase as a result of the project. The proposed solar panels would require cleaning to maintain operational efficiency; such cleaning would be occasional and only require minimal water use. Although the proposed administrative building may result in an increase in potable water usage because of the increase in building size, operational staffing would not increase. Therefore, normal SEWRF operations would not be expected to require substantial water supplies such that new or altered water facilities would be required. The project itself is considered construction of wastewater treatment facilities and is analyzed throughout this

MND. As discussed throughout this MND, mitigation measures would be required to ensure that impacts remain below a level of significance.

c) Would the project 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?

Less Than Significant Impact. As previously discussed in Section 3.9, Hydrology and Water Quality, stormwater on the project site drains via overland flow, west to the cement channel that traverses the project boundary and discharges into the San Elijo Lagoon. A portion of the proposed project would replace existing wastewater treatment equipment that would not create a new impervious footprint that would substantially alter the existing drainage pattern. Another part of the proposed project would construct a new administrative buildings and solar field, which would introduce new impervious surfaces that would change the drainage patter of the site. The proposed project would not result in a substantial increase in stormwater flows that would exceed the capacity of the cement drainage channel. Therefore, impacts would be less than significant.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. The proposed project would not result in a substantial long-term increase in water usage as compared to the existing SEWRF as it does not propose new water intensive land uses and would not increase SEWRF capacity and operational staffing. The proposed solar panels would require cleaning to maintain operational efficiency; such cleaning would be occasional and only require minimal water use. Although the proposed administrative building may result in an increase in potable water usage because of the increase in building size, operational staffing would not increase. Therefore, normal SEWRF operations would not be expected to require substantial water supplies such that new or altered water facilities would be required. Impacts would be less than significant.

e) Would the project 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?

No Impact. The proposed project involves repairs, rehabilitation, and replacement of components of the SEWRF which would improve the efficiency and function of the treatment process. The proposed project would not increase SEWRF capacity or

operational staffing; therefore, it would not increase wastewater generation. Therefore, no impact would occur.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Once operational, the renovated/upgraded SEWRF would not generate a new or larger solid waste stream as SEWRF capacity and operational staffing would not increase as a result of the proposed project. During construction, the project would result in a temporary increase in solid waste generation from construction debris. The project would be required to comply with federal, state, and local regulations regarding solid waste, including the City of Encinitas Construction and Demolition Debris for solid waste diversion. Therefore, impacts would be less than significant.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. During construction and operation, the project would be required to comply with applicable federal, state, and local regulations regarding the proper disposal of solid waste. Therefore, no impact would occur.

3.18 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?

Less Than Significant With Mitigation Incorporated. As discussed in Section 3.4, Biological Resources, construction of the proposed project would potentially result in significant impacts to biological resources. However, with incorporation of mitigation measures MM-BIO-1 through MM-BIO-9, all potentially significant impacts would be reduces to a level below significance. The proposed project would not substantially degrade the quality of the environment, impact fish or wildlife species, or plant communities. As discussed in Section 3.5, Cultural Resources, potential impacts regarding inadvertent discovery of cultural and paleontological resources could occur during excavation. However, implementation of mitigation measures MM-CUL-1 and

MM-CUL-2 would ensure that impacts would be less than significant. Overall, impacts would be less than significant with the incorporation of mitigation.

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)?

Less Than Significant With Mitigation Incorporated. As provided in the analysis presented in Chapter 3, the proposed project would not result in significant impacts to aesthetics, agriculture and forestry resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Mitigation measures recommended for biological resources and cultural resources would reduce impacts to below a level of significance.

The proposed project would incrementally contribute to cumulative impacts for projects occurring within the City. With mitigation, however, implementation of the proposed project would not result in any residually significant impacts that could contribute to a cumulative impact. In the absence of residually significant impacts, the incremental accumulation of effects would not be cumulatively considerable and would be less than significant.

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

Less Than Significant With Mitigation Incorporated. The potential for adverse direct or indirect impacts to human beings was considered in this MND in Sections 3.1, Aesthetics; 3.3, Air Quality; 3.5, Cultural Resources; 3.6, Geology and Soils; 3.7, Greenhouse Gas Emissions; 3.8, Hazards and Hazardous Materials; 3.9, Hydrology and Water Quality; 3.12, Noise; 3.13, Population and Housing; 3.14, Public Services; 3.15, Recreation; 3.16, Transportation and Traffic; and 3.17, Utilities and Service Systems. Based on this evaluation, there is no substantial evidence that construction or operation of the proposed project with the proposed mitigation measures incorporated would result in a substantial adverse effect on human beings.

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4 REFERENCES AND PREPARERS

4.1 References Cited

14 CCR 15000–15387 and Appendices A through L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

California EPA (Environmental Protection Agency). 2015. Cortese List Data Resources. http://www.calepa.ca.gov/SiteCleanup/CorteseList/.

California Public Resources Code, Section 21000–21177. California Environmental Quality Act, as amended.

Caltrans (California Department of Transportation). 2009. Technical Noise Supplement. Prepared by ICF Jones & Stokes. November 2009. http://www.dot.ca.gov/hq/env/noise/pub/tens_complete.pdf.

Caltrans. 2015a. *California Scenic Highway Mapping System*. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

Caltrans. 2015b. *Officially Designated Scenic Highways.* http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/schwy.htm.

CARB (California Air Resources Board). 2014. First Update to the Climate Change Scoping Plan: Building on the Framework. May 2014. http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

City of Encinitas. 2005. *City of Encinitas Design Guidelines*. April 2005. http://www.encinitasca.gov/modules/showdocument.aspx?documentid=1940.

City of Encinitas. 2010. *Existing Land Use, Exhibit 2-1*. *Encinitas General Plan Update, Chapter 2 Land Use*. http://www.encinitasca.gov/modules/showdocument.aspx?documentid=1456.

City of Encinitas. 2015. Municipal Code, Chapter 30.40, Performance Standards. http://www.qcode.us/codes/encinitas/.

CNRA (California Natural Resources Agency). 2009. Final Statement of Reasons for Regulatory Action. Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97. December 2009. http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf.

DOC (California Department of Conservation). 1982. *Mineral Land Classification: Aggregate Materials in the Western San Diego County Production–Consumption Region*. Prepared by S.L. Kohler and R.V. Miller. Special Report 153. Sacramento, California: California Department of Conservation, Division of Mines and Geology. Accessed November 26, 2012. http://archive.org/details/minerallandclass153kohl.

DOC. 1986. Landslide Hazards in the Encinitas Quadrangle, San Diego County, California. Landslide Hazard Identification Map No. 4. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_86-08/OFR_86-08.pdf.

DOC (Division of Land Resource Protection). 2015a. Farmland Mapping and Monitoring Program. *San Diego County Important Farmland 2012.* ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/sdg12_w.pdf.

DOC. 2015b. CGS Information Warehouse: Regulatory Maps. Accessed December 15, 2015. http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps.

DTSC (California Department of Toxic Substances Control). 2007. EnviroStor Hazardous Waste and Substances Site List. Accessed December 16, 2015. http://www.envirostor.dtsc.ca.gov/public/.

FEMA (Federal Emergency Management Agency). 2012. FIRM: Flood Insurance Rate Map, San Diego County, California and Incorporated Areas. NFIP Panel 1045G. Map Revised May 16, 2012.

FHWA (Federal Highway Administration). 2006. Roadway Construction Noise Model, Version 1.1. https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/.

FTA (Federal Transit Authority). 2006. *Transit Noise and Vibration Impact Assessment.* May 2006. http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf.

Ogden and Conservation Biology (Ogden Environmental and Energy Services Company and Conservation Biology Institute). 2001. *Draft Encinitas Subarea Plan*. Prepared for the City of Encinitas, Community Development Department. June 2001. Accessed January 2016. http://www.sandag.org/uploads/publicationid/publicationid_150_14153.pdf.

RWQCB (Regional Water Quality Control Board). 2015. Correspondence between Mr. Michael T. Thorton, San Elijo Joint Powers Authority and Brandi N. Outwin-Beals, San Diego Regional Water Quality Control Board. Subject: Report of Waste Discharge and Application for Reissuance of Waste Discharge Requirements and National Pollutant Discharge Elimination System Permit for San Elijo Joint Powers Authority, San Elijo Water Reclamation Facility. May 21, 2015.

SDAPCD (San Diego Air Pollution Control District). 2001. Rules and Regulations. Regulation IV. Prohibitions. Rule 67.0. Architectural Coatings. Revised December 12, 2001.

SDAPCD. 2009. Rules and Regulations. Regulation IV. Prohibitions. Rule 55. Fugitive Dust. Adopted June 24, 2009; effective December 24, 2009.

SDAPCD. 2012. Ozone Redesignation Request and Maintenance Plan for Submittal to the U.S. Environmental Protection Agency. December 19, 2012. Letter to CARB. http://www.arb.ca.gov/planning/sip/planarea/sansip/2012subltr.pdf.

SDG&E (San Diego Gas & Electric). 2015. Email communication on December 10, 2015, between Graham Beatty of Poseidon Water with Austin Melcher of Dudek regarding emissions factors. Original information from Kazeem Omidiji from Sempra on November 11, 2015 in an email to Beatty.

State of California. 2015. State Water Resources Control Board, GeoTracker. https://geotracker.waterboards.ca.gov/.

USFWS and SANDAG (U.S. Fish and Wildlife and San Diego Association of Governments) 2003. *Final Environmental Impact Statement/Environmental Impact Report for Threatened and Endangered Species due to Urban Growth within the Multiple Habitat Conservation Program Planning Area*. SCH No. 93121073. March 2003. Accessed January 2016. http://www.sandag.org/programs/environment/habitat_preservation/mhcp_eir_vol1.pdf.

4.2 List of Preparers

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Curtis Battle, GIS Technician
Devin Brookhart, Publications Specialist Lead
Taylor Eaton, Publications Specialist

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DUDEK

FIGURE 1

Regional Map

San Elijo Water Reclamation Facility Upgrades Mitigated Negative Declaration

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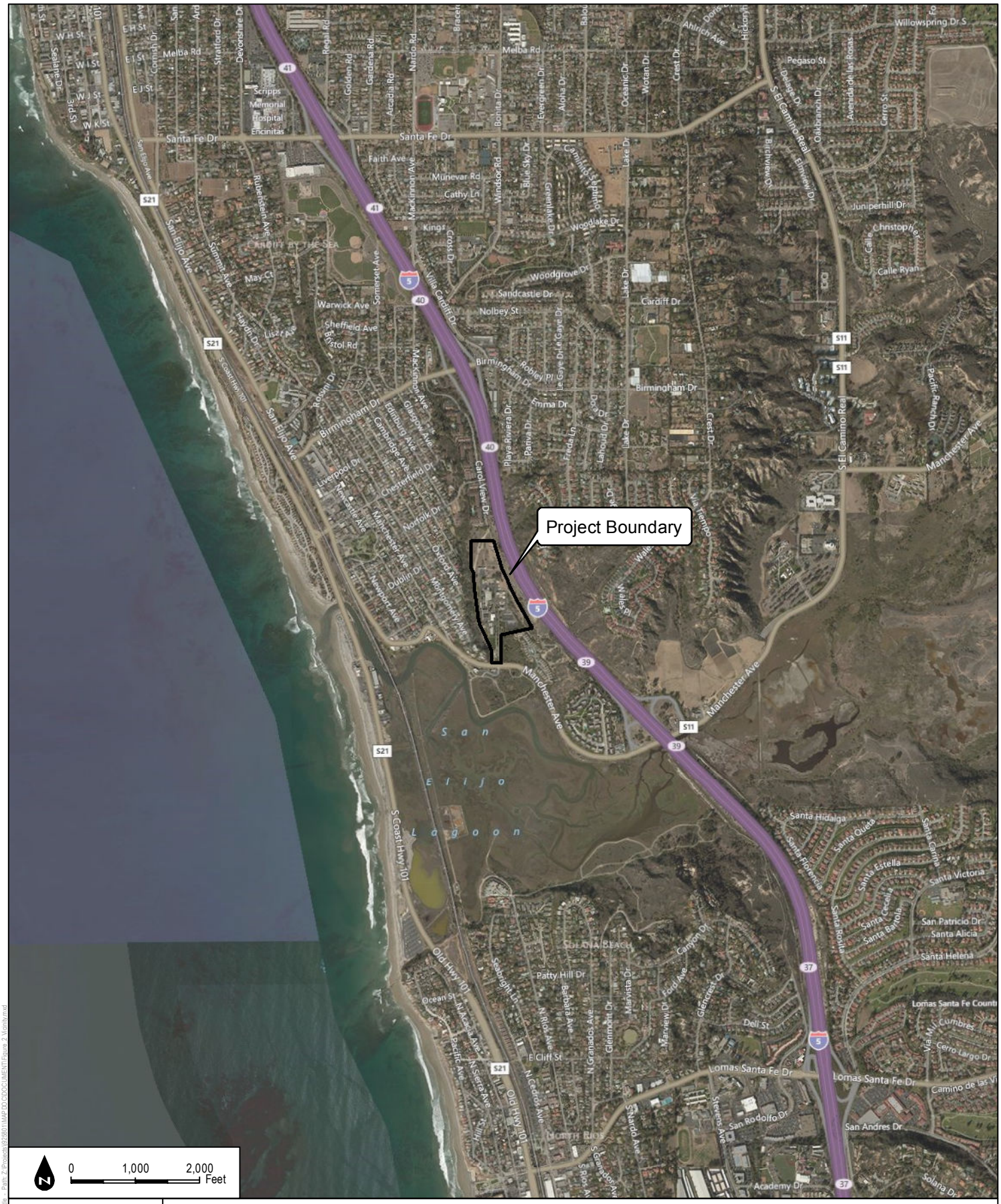

SOURCE: Bing Maps, 2015

Figure 2

Vicinity Map

DUDEK

San Elijo Water Reclamation Facility Upgrades Mitigated Negative Declaration

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SOURCE: SANDAG, 2015

FIGURE 3
Project Site

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San Elijo Water Reclamation Facility Upgrades Mitigated Negative Declaration

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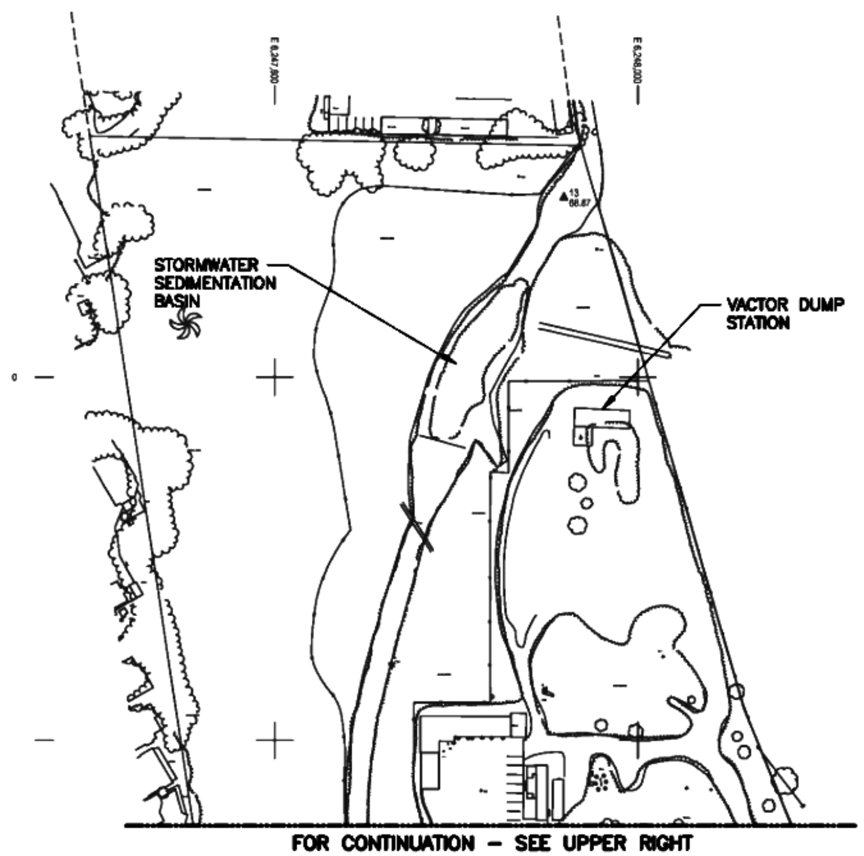
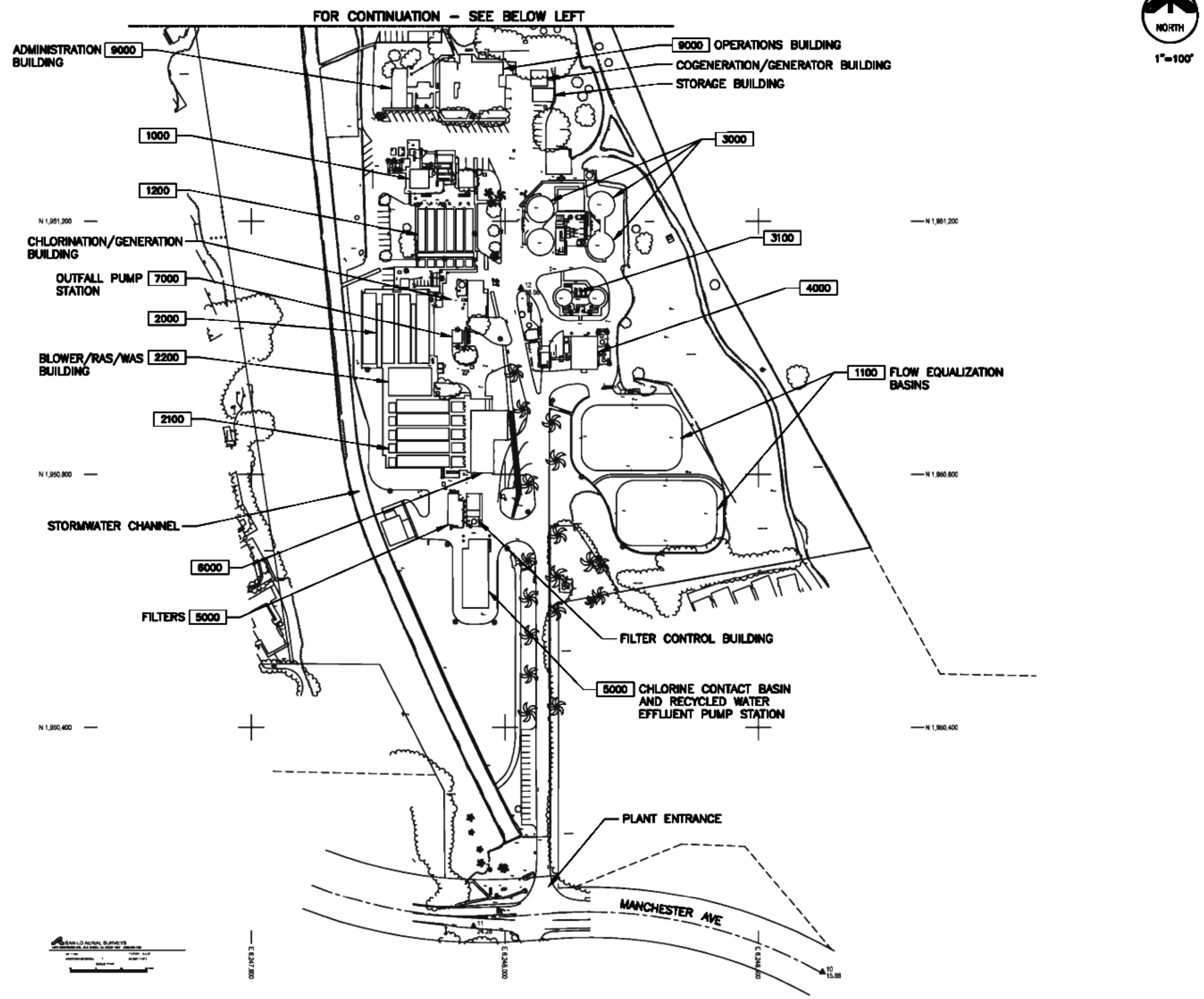


SITE PLAN
1"=100'

PROCESS NUMBER	PROCESS AREA
1000	HEADWORKS
1100	FLOW EQUALIZATION
1200	PRIMARY SEDIMENTATION
2000	AERATION BASINS
2100	SECONDARY SEDIMENTATION
2200	RAS/WAS
3000	DIGESTERS
3100	DAF
4000	SLUDGE DEWATERING
5000	RECYCLED WATER
6000	AWP
7000	EFFLUENT/OUTFALL
8000	GENERATOR BUILDING
8100	MCC BUILDING
9000	SUPPORT FACILITIES (ADMIN/OPERATIONS)



SITE PLAN
1"=100'

SAN ELIJO WATER RECLAMATION FACILITY SITE PLAN

SAN ELIJO JOINT POWERS AUTHORITY
2015 FACILITY PLAN

DUDEK

SOURCE: Carollo, 2015

FIGURE 4
Existing Site Plan

San Elijo Water Reclamation Facility Upgrades Mitigated Negative Declaration

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DUDEK

SOURCE: Carollo

FIGURE 5

Proposed Project Components

San Elijo Water Reclamation Facility Upgrades Mitigated Negative Declaration

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APPENDIX A

Air Quality and Greenhouse Gas Emissions Model Output

APPENDIX B

Biological Resources Technical Report

APPENDIX C

Phase I Resources Technical Report

APPENDIX D

Noise Model Output

APPENDIX E

Mitigation Monitoring and Reporting Program

APPENDIX F

Responses to Comments