Addendum to the Environmental Impact Report for the San José - Santa Clara Water Pollution Control Plant Master Plan (SCH# 2011052074)

LEGACY BIOSOLIDS LAGOONS SITE CLEANUP

File No. ER20-007

Prepared by

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

April 2020

ADDENDUM TO THE SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT MASTER PLAN FINAL ENVIRONMENTAL IMPACT REPORT (SCH#2011052074) AND ADDENDA THERETO

Pursuant to Section 15164 of the CEQA Guidelines, the City of San José has prepared an addendum to the San Jose/Santa Clara Water Pollution Control Plant Master Plan Environmental Impact Report (PMP FEIR) because minor changes made to the project, as described below, do not raise important new issues about the significant impacts on the environment.

ER20-007 -- San José/Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup. Relocate, consolidate, and remediate 23 inactive biosolids lagoons within the existing "legacy" inactive biosolids lagoons site, as part of the San Francisco Bay Regional Water Quality Control Board's Order Number R2-2019-0026 and in alignment with the South Bay Shoreline Project, on an approximately 168-acre site.

Location: 700 Los Esteros Road, San José CA **Council District:** 4

The environmental impacts of this project were addressed by the Final Program Environmental Impact Report (EIR) entitled, "San Jose/Santa Clara Water Pollution Control Plant Master Plan Environmental Impact Report," and findings were adopted by City Council Resolution No. 76858 on November 19, 2013.

The proposed project is eligible for an addendum pursuant to CEQA Guidelines §15164, which states that "A lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in CEQA Guidelines §15162 calling for preparation of a subsequent EIR have occurred."

Circumstances which would warrant a subsequent EIR include substantial changes in the project or new information of substantial importance which would require major revisions of the previous EIR due to the occurrence of new significant impacts and/or a substantial increase in the severity of previously identified significant effects. The proposed project is within the scope of the Plant Master Plan EIR and addenda thereto.

The following impacts were reviewed and found to be adequately considered by the EIR cited above:

☒Aesthetics	☒Agriculture Resources	☒Air Quality
☒Biological Resources	☒Cultural Resources	☒Geology and Soils
☒Greenhouse Gas Emissions	☒ Hazardous Materials	☒Hydrology & Water Quality
☒Land Use	☒Mineral Resources	☒Noise
☒Population and Housing	☒Public Services	☒Recreation
☒Transportation/Traffic	☒Utilities & Service Systems	☒Energy
☒Growth Inducing	☒Cumulative Impacts	☒Mandatory Findings of Sig.

ANALYSIS:

The proposed project was analyzed for environmental impacts using an Initial Study Checklist and technical reports (attached). No new or more significant impacts beyond those identified in the San José/ Santa Clara Water Pollution Control Plant Master Plan Final Environmental Impact Report have been identified, nor have any new mitigation measures or alternatives which are considerably different from those analyzed, been identified.

This addendum will not be circulated for public review, but will be attached to the PMP FEIR, pursuant to CEQA Guidelines Section §15164(c).

Kenneth Rosales
Environmental Project Manager

4-23-2020
Date

Rosalynn Hughey, Director
Planning, Building and Code Enforcement

Deputy

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CHAPTER 1
Introduction

1.1 Background

1.1.1 Overview of the San José-Santa Clara Regional Wastewater Facility

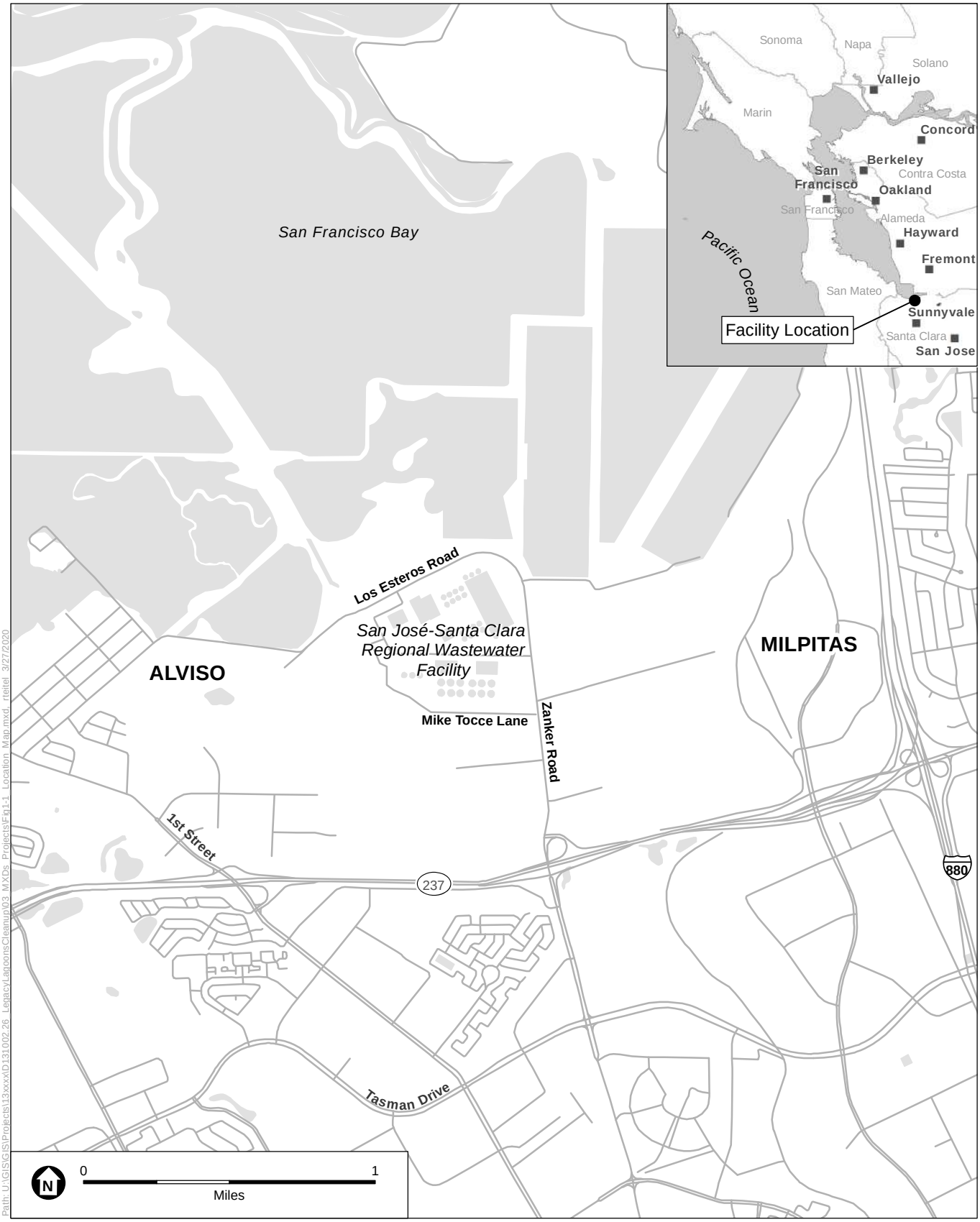
The San José-Santa Clara Regional Wastewater Facility (Facility) treats domestic, industrial, and commercial wastewater from the cities of San José, Santa Clara, Campbell, Los Gatos, Monte Sereno, Cupertino, Milpitas, and Saratoga; and unincorporated Santa Clara County. The Facility is located at 700 Los Esteros Road in north San José, California, between State Route (SR) 237 and San Francisco Bay and flanked by the community of Alviso to the west and the City of Milpitas to the east, as shown in **Figure 1-1**. In total, the existing service area covers roughly 300 square miles and contains a service population of approximately 2 million people (1.4 million residents and 600,000 workers). Originally constructed in 1956, the Facility treats an average of 110 million gallons per day (mgd) of wastewater, with an existing capacity of 167 mgd of average dry weather influent flow. The Facility provides a tertiary level of treatment, in accordance with state and local regulations. It produces recycled water for irrigation, industrial use and toilet flushes, and also discharges treated wastewater to the South San Francisco Bay. The City of San José (City) manages the Facility and the surrounding Facility lands, which together total approximately 2,680 acres.

About half of this area consists of current and former lagoons and drying beds used for biosolids[1] management, and lands that have provided a buffer between Facility operations and neighboring land uses. The main operational area of the Facility occupies about seven percent of Facility and surrounding lands (196 acres), and includes most of the facilities used in wastewater treatment operations, with the exception of the lagoons and beds used for solar drying of biosolids (**Figure 1-2**).

1.1.2 Plant Master Plan

In December of 2013, the City adopted the San José/ Santa Clara Water Pollution Control Plant Master Plan (hereon as the Plant Master Plan) (City of San José, 2013). The City prepared the Plant Master Plan for the Facility and the surrounding lands to identify Facility improvement projects needed to address aging infrastructure, reduce odors, accommodate projected population growth in the Facility's service area, comply with changing regulations that affect the Facility, and to develop a comprehensive land use plan for the entire site.

[1] "Biosolids" refers to treated sewage sludge: the solid residuals from the wastewater treatment process.



SOURCE: ESA, 2019

San Jose-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 1-1
San José-Santa Clara Regional Wastewater Facility Location

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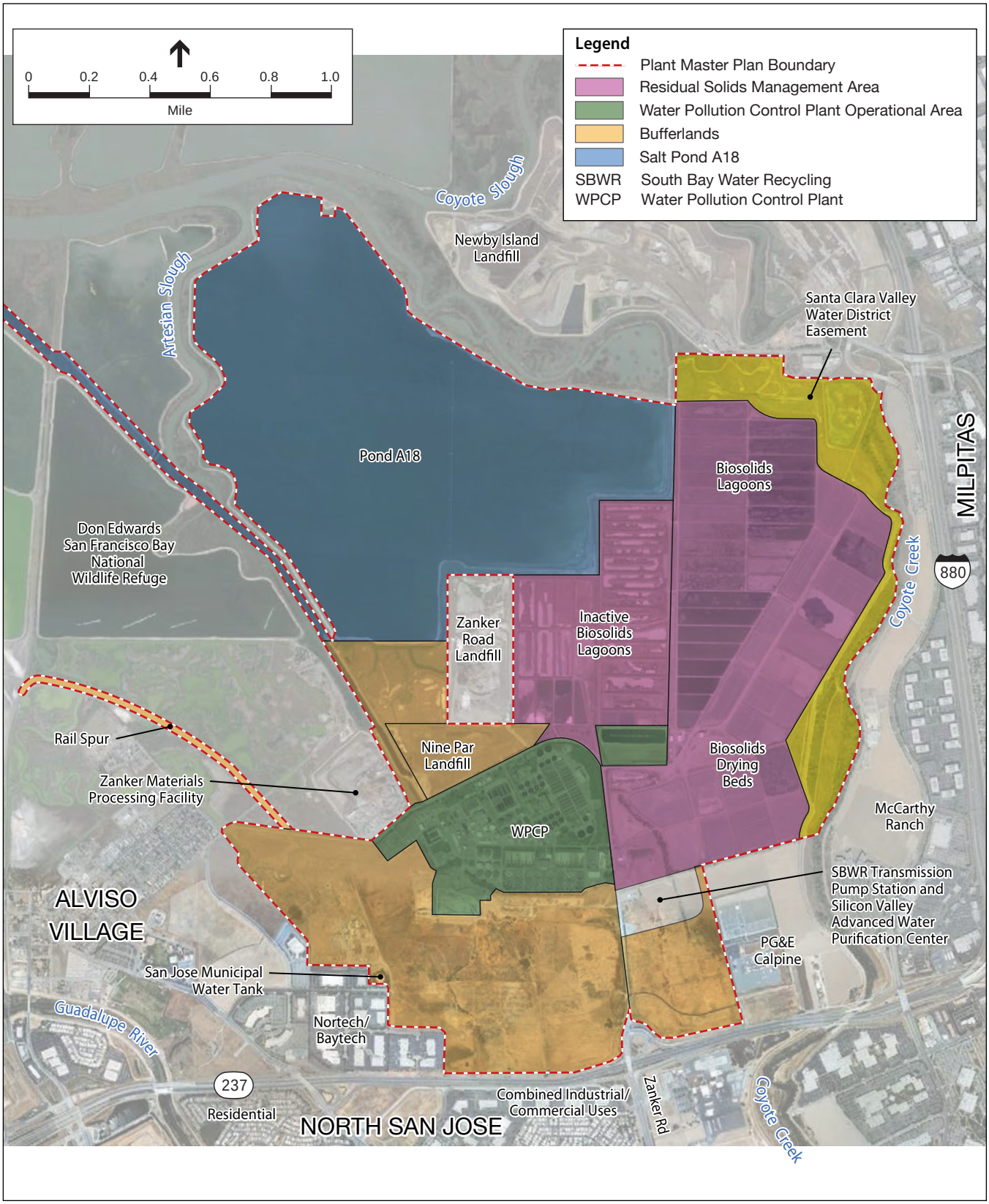

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SOURCE: ESA | J&S

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 1-2
Regional Wastewater Facility Existing Land Uses

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The master planning effort identified both near-term and long-term (to year 2040) Capital Improvement Program (CIP) facility improvements and land uses. The plan covers the components, processes, and land uses within the approximately 2,680-acre boundary of the Facility, including Pond A18.

The City was the lead agency for the San José-Santa Clara Water Pollution Control Plant Master Plan Environmental Impact Report (EIR) (Plant Master Plan EIR; State Clearinghouse No. 2011052074; City of San José File Number PP11-403).[2] The City adopted the EIR for the Plant Master Plan on November 19, 2013. The EIR evaluated potential environmental impacts that could occur as a result of implementing the Plant Master Plan, including the biosolids facilities. The EIR also provided applicable mitigation to reduce the intensity of potential environmental impacts.

1.1.3 Existing Lagoons

Prior to 1971, biosolids[3] from the Facility were deposited into a series of 25 clay-lined lagoons now referred to as the legacy biosolids lagoons, which hold an estimated volume of 570,000 cubic yards of biosolid material.[4] The lagoons (L-1 through L-25, shown on **Figure 1-3**) were constructed between 1962 and 1973. Each lagoon is approximately 300 feet by 1,200 feet in area, and separated from adjacent lagoons or other features by berms that are approximately 15 feet tall. The biosolids remained in place until they were restructured into windrows[5] in the mid-1990s. The San José Police Department constructed and currently operates a 25-acre bomb disposal site within legacy Lagoon 8 (L-8). Legacy Lagoon 4 (L-4) was transformed and is currently used as a storm water retention basin. The biosolids that once were contained within the L-4 and L-8 were transferred to legacy Lagoon 12 (L-12) in 1992 and 1994, respectively.[6] No additional material has been placed within the Legacy Lagoons since 1974. Currently, the biosolids are stockpiled in approximately 9-foot high windrows located within the center of each inactive lagoon.

Sampling and analysis of the legacy biosolids over the last 30 years, and most recently in 2010, has characterized the material as potentially hazardous waste due to exceedances of the California soluble threshold limit concentration (STLC) for cadmium, lead, and chromium.

1.2 Purpose of This Addendum

Since completion of the Plant Master Plan and the EIR, the City has received a Site Cleanup Order issued by the San Francisco Bay Regional Water Quality Control Board requiring the City to achieve cleanup and closure of the legacy biosolids, as described in detail in Chapter 2 and included as **Appendix A**.

2 The legal name of the facility remains "San José/Santa Clara Water Pollution Control Plant" but beginning in early 2013, the facility's common name was changed to San José-Santa Clara Regional Wastewater Facility.

3 "Biosolids" refers to treated sewage sludge: the solid residuals from the wastewater treatment process.

4 Based on estimates completed in November 2019. Previous work (1992) estimated the volume as 986,500 cubic yards.

5 A long line of material heaped up by the wind or (as is the case here) by a machine.

6 Due to the removal of the biosolids and transfer to a new use, both L-4 and L-8 are excluded from clean-up.

SFO\13xxxx\D1310026 - Legacy Lagoons Cleanup\05 Graphics-GIS-Modeling\Illustrator

SOURCE: ESA, 2019; Google Earth, 2019

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 1-3
Legacy Biosolids Lagoons Area

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Onsite closure would occur in areas that were previously identified for future Facility operations in the Plant Master Plan. Because the City has proposed these changes following EIR adoption, an addendum to the EIR is necessary to meet the requirements of the California Environmental Quality Act (CEQA).

The CEQA Guidelines (Sections 15162 and 15164) allow that a lead agency may prepare an addendum to a previously adopted or certified EIR if minor technical changes or additions to the environmental evaluation are necessary and none of the following provisions under CEQA Guidelines Section 15162 for Subsequent EIRs apply to the Project:

1. Substantial changes are proposed in the project which will require major revisions of the previous Environmental Impact Report due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous Environmental Impact Report due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous Environmental Impact Report was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous Environmental Impact Report;

    b. Significant effects previously examined will be substantially more severe than shown in the previous Environmental Impact Report;

    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous Environmental Impact Report would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Addendum documents that the Legacy Biosolids Lagoons Site Cleanup Project (Project) does not trigger any of the conditions described above. Specifically, given the Project description and knowledge of the Project area (based on the Project, site-specific environmental review, and environmental review prepared for the City's Plant Master Plan EIR), the City has concluded that the Project would not result in any new significant impacts not previously disclosed in the circulated EIR; nor would it result in a substantial increase in the magnitude of any significant environmental impact previously identified. For these reasons, an addendum to the approved EIR is sufficient to meet the requirements of CEQA Guidelines Section 15164. An addendum need not be circulated for public review under CEQA Guidelines Section 15164, but can be included in or attached to the final adopted EIR. The City must consider the addendum with the adopted EIR prior to making a decision on the Project.

The approved mitigation measures provided in the adopted Plant Master Plan EIR Mitigation Monitoring and Reporting Program (MMRP) have been incorporated by reference, with modifications (additions, deletions, renumbering/renaming, or other minor revisions) made as necessary to apply to the Project. The adjusted mitigation measures do not change the original impact conclusions from the Plant Master Plan EIR, nor are they considerably different from that analyzed in the Plant Master Plan EIR.

References

City of San José, 2013. San José/Santa Clara Regional Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, 2013. *The Plant Master Plan*, November 2013.

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CHAPTER 2
Project Description

2.1 Project Location

The Legacy Biosolids Lagoons Site Cleanup Project (Project) is located in the northern area of Santa Clara County, within the San José-Santa Clara Regional Wastewater Facility (Facility) at 700 Los Esteros Road in the City of San José, as shown on **Figure 2-1**. The former salt pond A18 and San Francisco Bay border the Project site to the north; California State Route 237 is approximately 1 mile to the south and Interstate 880 approximately 0.9 miles to the east. Coyote Creek is approximately 0.6 miles east of the Project site, as shown on **Figure 2-2**.

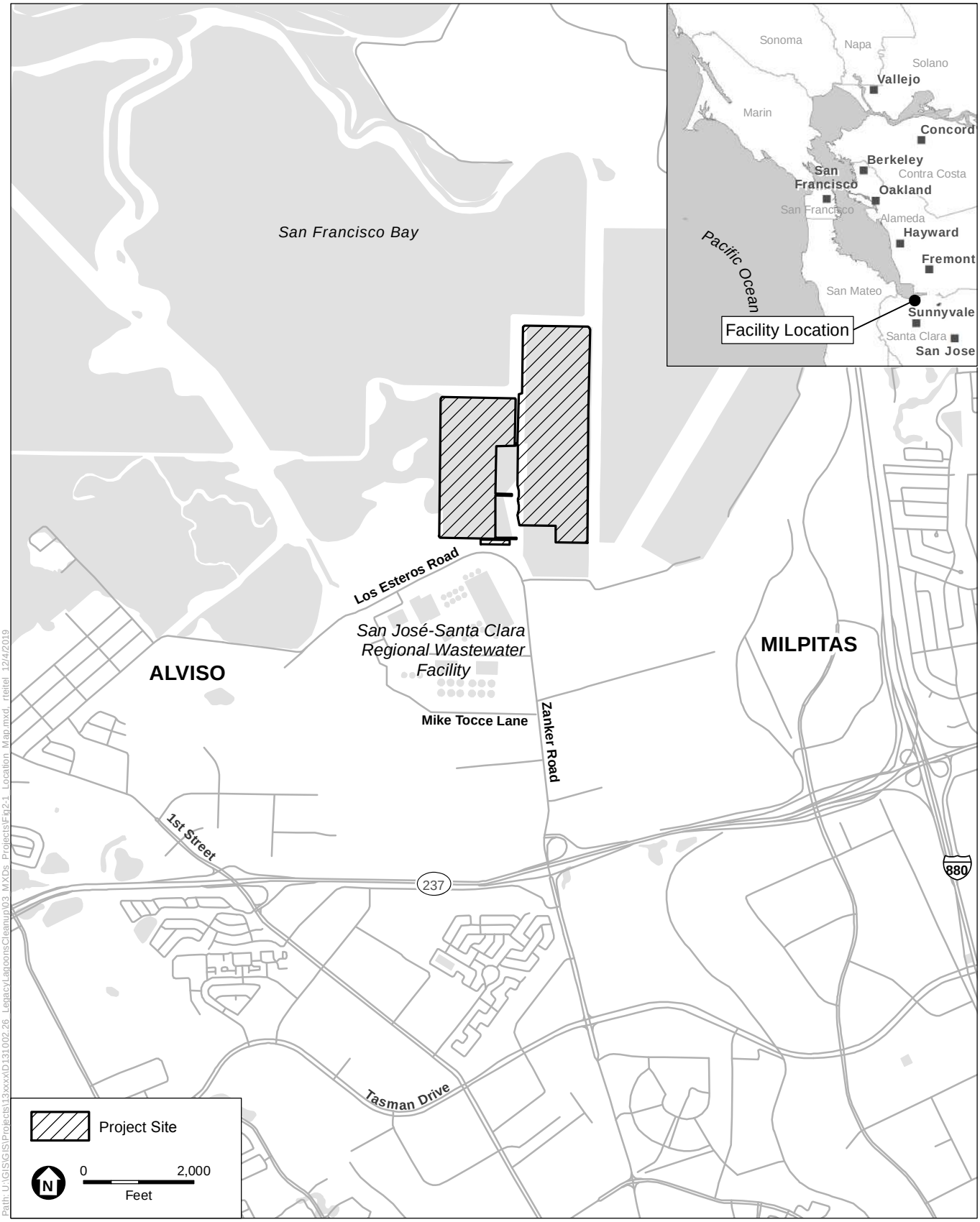
2.2 Project Background

During the period from 1962 to 1974, biosolids[7] generated from the Facility treatment process (referred to as "legacy" biosolids) were discharged and accumulated in a series of bermed lagoons where they currently remain. The now-inactive biosolids lagoons consist of 23 lagoons (L-1 through L-25, with the exception of L-4 and L-8) constructed over native clay covering an approximately 168-acre area, as shown in Figure 1-3. Two lagoons, L-4 and L-8, do not contain biosolids and only a portion of L-25 contains biosolids (refer to Figure 2-2). Each inactive lagoon is approximately 300 feet by 1,200 feet (or approximately 8.26 acres) in surface area. Approximately 670,000 cubic yards of biosolids material are estimated to have been placed within the lagoons. No additional material has been placed within the lagoons since 1974. **Table 2-1** further summarizes actions taken in the lagoons since 1974.

During the period the lagoons were actively used, the Facility processed waste from industrial activities that were not subject to pretreatment requirements.[8] Sampling and analysis of the legacy biosolids over the last 30 years determined some of the biosolids material may be characterized as hazardous waste as defined in Title 22 Section 66261.24 of the California Code of Regulations due to exceedances of the California soluble threshold limit concentrations (STLC) for cadmium, lead, and chromium. These analyses did not characterize the biosolids material as a federal hazardous waste under the Resource Conservation and Recovery Act (RCRA).

7 "Biosolids" refers to treated sewage sludge: the solid residuals from the wastewater treatment process.

8 Placement of legacy biosolids in the lagoons occurred in large part prior to the Clean Water Act of 1972. The Clean Water Act established the National Pretreatment Program, which requires industrial and commercial dischargers to obtain permits or other control mechanisms to discharge wastewater to a publicly-owned treatment works (such as the Facility).



SOURCE: ESA, 2019

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-1
Project Location

ESA

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SOURCE: ESA, 2019; Google Earth, 2019

Note: Lagoon L-25 is divided into four "operational cells." The project area includes the two eastern operational cells. Biosolids are not present in the two western operational cells, which is why they are excluded from the project area.

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-2
Project Area

Native soil and berm material within the Project area is not hazardous. A soil characterization study was completed in March of 2019 for the berm material of Lagoons L-16 through L-19. Based on results of sampling and observations of the upper approximate 10 to 12 feet of berm fill material, it is assumed that the berms were constructed from Bay Mud in 1969 when Lagoons L-16 through L-19 were constructed. The study also determined that native clay is present beneath the berm material. Soil samples indicate the majority of the bermed soil from those lagoons may be suitable for reuse as wetland foundation material and that portions of the fill material could also be segregated and reused as wetland surface material.

In 1992, Lagoon L-4 was transformed into a stormwater retention basin and the biosolids material within this lagoon was relocated to Lagoon L-12. In 1994, the biosolids material within Lagoon L-8 was moved to Lagoon L-12, and the City of San José Police Department began using Lagoon L-8 as a bomb disposal training area. In 1998, the biosolids within each of the other 23 lagoons were bulldozed into approximately 8 to 10 -foot-high windrows located in the center of each lagoon, set back approximately 40 to 50 feet from the containment berms. In 2007, Lagoon L-25 was divided into quadrants with only the easternmost quadrant containing legacy biosolids. **Figure 2-3** illustrates the windrows as part of existing topography in Lagoons L-16 to L-19.

TABLE 2-1
SUMMARY OF INDIVIDUAL LAGOON SITE HISTORY

Lagoons	Actions
L-1, L-2, L-3 L-5, L-6, L-7 L-9, L-10, L-11 L-13 through L-24	• Biosolids placed in lagoons in 1962-1974 • Biosolids bulldozed into windrows in 1998[a]
L-4	• Biosolids placed in lagoons in 1962-1974 • Biosolids moved to L-12 and L-4 becomes stormwater retention basin in 1992
L-8	• Biosolids placed in lagoons in 1962-1974 • Biosolids moved to L-12 and L-8 becomes bomb disposal facility in 1994
L-12	• Biosolids placed in lagoons in 1962-1974 • Biosolids relocated to L-12 from L-4 in 1992 • Biosolids relocated to L-12 from L-8 in 1994 • Biosolids bulldozed into windrows in 1998
L-25	• Biosolids placed in lagoons in 1962-1974 • Biosolids bulldozed into windrows in 1998 • Biosolids consolidated into eastern quadrant of L-25 in 2007

NOTES:
a "Windrows" are long lines of material heaped up by the wind or a machine.

SOURCE: Cornerstone, 2019. *Closure Alternatives Analysis Plan, Legacy Biosolids Lagoons, San José/Santa Clara Regional Wastewater Facility*, September 25.

The City recognized the need to remediate the inactive biosolids lagoons as part of the Plant Master Plan.[9] As discussed in Chapter 1, *Introduction* of this document, the City approved implementation of B1: Inactive Lagoons Rehabilitation. Section 3.5.6 of the Plant Master Plan Environmental Impact Report (EIR) describes Improvement B1, which was evaluated at a program level of detail in the Plant Master Plan EIR and included the following activities:

- field testing and an assessment of the contents of the inactive lagoons;
- remediation, which may include leaving biosolids in place or re-using elsewhere within the site; and
- filling some of the lagoons to level the grade.

Once rehabilitation of the inactive lagoons is completed, most of the area would become available for other operational improvements related to biosolids processing.

As part of the approved Plant Master Plan shown in **Figure 2-4**, the City designated 35 acres in the northernmost portion of the inactive lagoons (specifically Lagoons L-16 through L-19) as a "wetlands refinement area."[10] In this area, the City proposed to remove the legacy biosolids in a manner that minimizes impacts on wetland habitat. The Plant Master Plan EIR acknowledged the uncertainties regarding future connectivity of this area to the Bay (the levee alignment of the South San Francisco Bay Shoreline Levee Project, discussed below, was not resolved at that time), recognizing that habitat restoration within this area could be proposed at a later time.

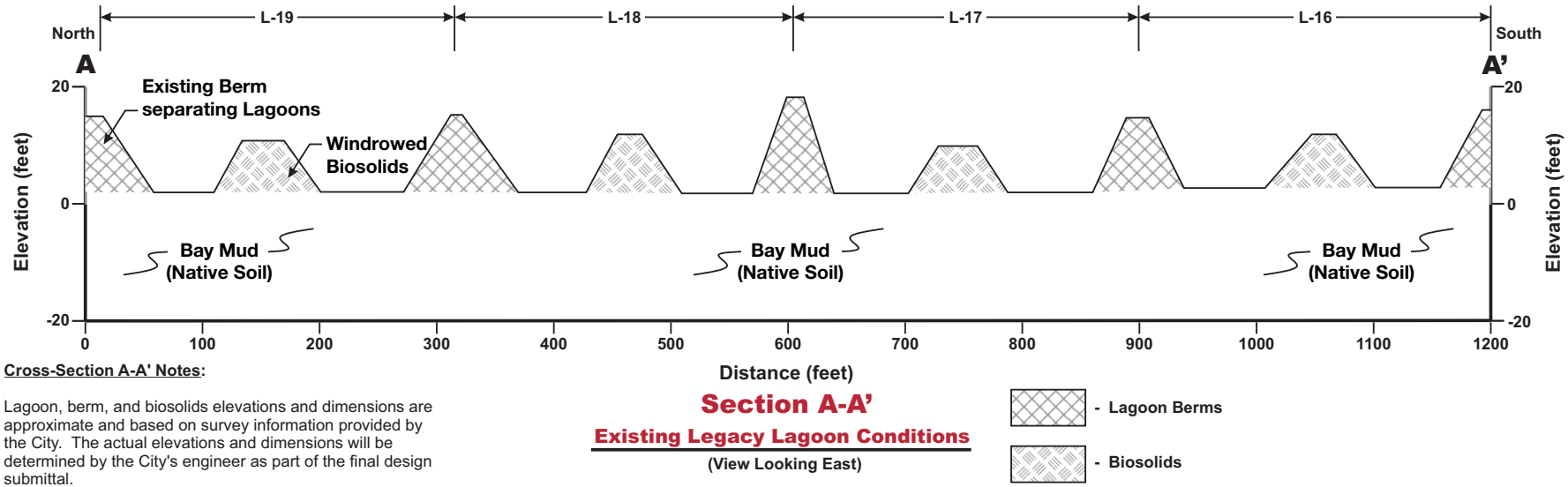
2.3 Changes Since Plant Master Plan Approval

In spring of 2014, the Facility's Capital Improvement Program team conducted a detailed project validation review process of all projects recommended in the Plant Master Plan. This validation effort led to a change from the biosolids processing approach described in the Plant Master Plan (which involved the use of covered, lined sludge storage lagoons for digested sludge and separate dewatering and cake storage facilities), to a smaller operation consisting of digested sludge storage tanks and a consolidated dewatering and cake storage facility, which is more aligned with current best practices in the wastewater industry today.

On June 2, 2015, the Council approved recommendations to: (1) locate the dewatering facility (Plant Master Plan improvements B2-P1 and B2-P2) in the area east of Zanker Road, while also reserving a portion of the area east of Zanker Road for future biosolids processes; (2) proceed with designing a new dewatering facility sized to process 100 percent of sludge volume generated by the digestion process; and (3) subsequently decommission the existing lagoons and drying beds.

[9] As discussed in Chapter 1 of this document, the City adopted the San José/ Santa Clara Water Pollution Control Plant Master Plan in November 2013.

[10] City of San José. San José/Santa Clara Water Pollution Control Plant Master Plan. November 2013.



Cross-Section A-A' Notes:

Lagoon, berm, and biosolids elevations and dimensions are approximate and based on survey information provided by the City. The actual elevations and dimensions will be determined by the City's engineer as part of the final design submittal.

SOURCE: Cornerstone Earth Group, 2019

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-3
Cross Section of Existing Lagoons L-16 to L-19

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SOURCE: City of San Jose, 2013

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-4
Approved Plant Master Plan Land Use Plan

As part of the Plant Master Plan, the City had proposed to construct a series of covered, lined lagoons in the location of inactive Lagoons L-5 through L-7 and L-9 through L-12, along with an associated sludge backup pipeline in the Plant Expansion Area illustrated on Figure 2-4. Other biosolids processing facilities (sludge drying and dewatering facilities) were proposed for inactive Lagoons L-1 through L-3. Inactive lagoons rehabilitation was proposed for the remaining lagoons.

In addition to these changes in biosolids management, as discussed in the following section, the San Francisco Bay Regional Water Quality Control Board (RWQCB) adopted Order No. R2-2019-0026 on August 28, 2019 and the opportunity to coordinate with the adjacent South San Francisco Bay Shoreline Levee Project has progressed; both of these factors encourage the remediation of the inactive lagoons (Lagoons numbered L-1 through the eastern quadrants of L-25, inclusive, with the exception of L-4, L-8, and the western quadrants of L-25). By way of the Order, regulatory oversight of this cleanup and closure has been transferred to the RWQCB from the Department of Toxic Substance Control (DTSC). The RWQCB will coordinate with other local, state, and federal agencies, including DTSC as required for closure of the Project site.

2.4 Project Purpose and Objectives

The purpose of the Project is to remediate the inactive biosolids lagoons. Project objectives are as follows:

- Remediate the inactive biosolids lagoons in compliance with the RWQCB Order Number R2-2019-0026, adopted on August 28, 2019;[11]
- Prioritize remediation of lagoons that could facilitate realignment of the South Bay Shoreline Project; and
- Advance the Plant Master Plan objectives, particularly those related to flood control, efficient operations, and habitat.

These objectives are detailed below.

2.4.1 Regional Board Order and South San Francisco Bay Shoreline Levee Project

The City has proposed the Project in response to the San Francisco Bay Regional Water Quality Control Board Order Number R2-2019-0026 (referred to as "the Order" in this document), mandating the Facility to conduct site investigations for the cleanup and closure of the inactive biosolids lagoons (included as **Appendix A**). This Order requires that the City:

1. Complete additional sampling and analysis of the biosolids;
2. Identify and evaluate cleanup and closure options;

[11] California Regional Water Quality Control Board, San Francisco Bay Region, Order No. R2-2019-0026 Site Cleanup Requirement for City of San José San José/Santa Clara Regional Wastewater Treatment Facility Biosolids Ponds, adopted August 28, 2019.

3. Submit a closure alternative analysis plan and schedule that evaluates alternatives for the final cleanup and closure;
4. Submit a detailed consolidation and closure plan and schedule for the preferred alternative to achieve cleanup and closure; and
5. Ensure that the site is fully closed by November 1, 2023, or as otherwise consistent with the South San Francisco Bay Shoreline Levee (Shoreline Project) Project's construction schedule.

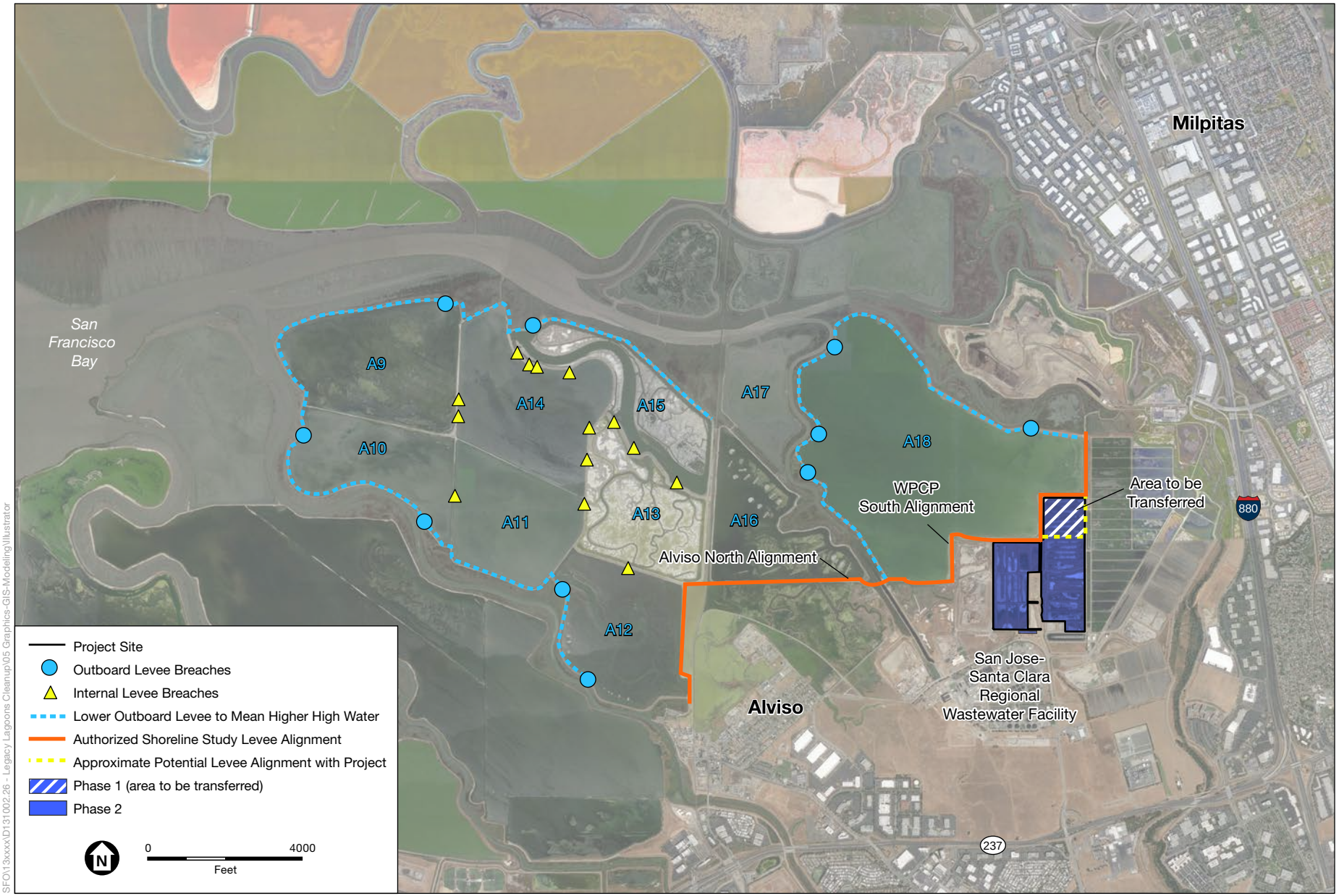
The Order is needed because there is a potential threat to beneficial uses of the waters of the State and public health posed by the previous discharge of biosolids to the inactive lagoons. The Order states:

> *"[T]here is a potential human health risk from the biosolids waste due to the expected increase in human activity in the vicinity of the [Legacy Biosolids Lagoons Site Cleanup Project] Site during construction of the Shoreline Project… and the use of the publicly accessible flood risk management levee upon completion of the Shoreline Project."*

The Shoreline Project is proposed to reduce tidal flood risk by constructing a new levee along the South San Francisco Bay Shoreline and restoring approximately 2,900 acres of former salt production ponds to tidal marsh habitat in the Alviso Pond Complex.[12] The Shoreline Project would provide flood protection for shoreline lands of San José such as Alviso and Facility lands. The U.S. Congress approved funding for the Shoreline Project in 2018. Construction of the reach of the Shoreline Project in the vicinity of the Project site would begin in 2022 or 2023.

The U.S. Army Corps of Engineers (Corps) is the federal sponsor of the Shoreline Project. The Santa Clara Valley Water District (now Santa Clara Valley Water) and California State Coastal Conservancy are the non-federal cost sharing partners for the Shoreline Project. The Corps has expressed interest in receiving the northern portion of the Project site (Lagoons L-16 to L-19) for use in the Shoreline Project under the conditions that the biosolids are removed and the land is available by January 2021. The City is in agreement with that proposal, should agreements and permits needed meet the accelerated timeline, which would result in routing the Shoreline Project levee through the proposed Project site and incorporating land north of the new levee into Pond A18, as shown in **Figure 2-5**. Ownership of that northern portion of the Project site (Lagoons L-16 to L-19) would be transferred to the partnering agencies as part of the Project.

[12] Department of the Army, Chief of Engineers, *South San Francisco Bay Shoreline, Santa Clara County, California*, December 18, 2015.



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SOURCE: ESA, 2019; US Army Corps of Engineers, 2019; Google Earth, 2019

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-5
South San Francisco Bay Shoreline Study Authorized Project

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There is a substantial nexus between the Shoreline Project and the proposed Project, as follows:

- While the realigned Shoreline Project levee would divide the Project site physically and in terms of construction phasing, the Project cannot be easily subdivided into elements that do, and do not, involve coordination with the Shoreline Project. Legacy biosolids removed from Lagoons L-16 to L-19 must be disposed of, and therefore the disposal action must be included as part of the Project; the location of disposal must be within the area of contamination (the Project site) pursuant to the Order. Consistent with the basis for the Order, the City must remediate the entire inactive biosolids lagoons to ensure appropriate separation between the legacy biosolids materials and levee construction activities as well as proposed public access associated with the levee-top trail proposed as part of the Shoreline Project (the levee-top trail would be located on top of the levee proposed along the alignment shown on Figure 2-5).
- The Order allows the beneficial reuse of the legacy biosolids and/or berm material for the Shoreline Project, in addition to reuse in the Project consolidation area. The Shoreline Project needs material for levee construction, and the lagoon berm material within Lagoons L-16 to L-19 or other lagoons could be beneficially reused for the Shoreline Project. Use of the berm material could reduce the amount of material needed and/or managed by both projects.
- The whole of the City's Project is remediation of all legacy biosolids materials within the Project site (i.e., all of the lagoons within which legacy biosolids are stored), consistent with the Order. Consolidation and containment must be addressed holistically for all the lagoons. The Project includes designing one consolidation area (see Section *2.5.1 Project Components)*, with appropriate containment features, to which the legacy biosolids from all lagoons would be moved, including those from Lagoons L-16 to L-19.
- As stated in the Order, realigning the Shoreline Project levee and transferring the associated land is expected to benefit both projects by reducing costs, reducing barriers to permitting, and allowing faster provision of improved flood protection to the Facility lands and Alviso. Realigning the Shoreline Project through the Project site would make the Shoreline Project easier to construct. In addition, restoring the northern area of the Project site (Lagoons L-16 to L-19) as part of the Shoreline Project is expected to expand the area to convert to tidal action through restoration of Pond A18, resulting in higher quality habitat than what currently exists in these lagoons and mitigating all or a large portion of the impacts on waters and wetlands that would occur as a result of the remediation.
- Pursuant to the Order, should the City support the realignment of the Shoreline Project levee through the Project site, the legacy biosolids must be removed from Lagoons L-16 to L-19 by January 1, 2021, so the land may be acquired for use in the Shoreline Project by May 2021, or as otherwise consistent with the Shoreline Project's land acquisition schedule. As noted previously, the entire Project site must be remediated by 2023, or otherwise consistent with the Shoreline Project's construction schedule and planned activities in the legacy biosolids lagoons' vicinity.

2.4.2 Plant Master Plan

As discussed in Section 2.2, remediation of the Project area was included in the City's Plant Master Plan. The purpose of the inactive lagoons rehabilitation evaluated in the Plant Master Plan EIR was to remediate the area so that it could be used for other biosolids process improvements identified in the Plant Master Plan. As noted in Section 2.3 above, since approval of the Plant

Master Plan, the dewatering facilities were relocated east of Zanker Road, instead of within the Project area as originally planned. The City is currently designing the dewatering facility, and plans to construct the facility east of Zanker Road.

The Plant Master Plan includes 15 objectives to advance the overall operational, economic, environmental, and social goals of the Facility. In particular, the Project would advance the following Plant Master Plan objectives:

- ***Flood Control***. In partnership with other agencies, protect the Facility from flooding and risks associated with sea-level rise.
- ***Efficient Operations***. Maximize the long-range efficient use of the Facility's existing facilities and reduce the footprint of the existing biosolids treatment area.
- ***Habitat***. In partnership with other agencies, protect, enhance, and/or restore habitat, including upland areas, wetlands, and riparian vegetation near creeks.

2.5 Project Components

2.5.1 Project Overview

The City would move the legacy biosolids from the 23 inactive lagoons in two phases so that Lagoons L-16 to L-19 can be transferred to Shoreline Project partnering agencies by January 1, 2021 for inclusion in the Shoreline Project. The phases would be implemented as follows:

- **Phase 1, Interim Consolidation**. Removal of the approximately 157,000 cubic yards of legacy biosolids from Lagoons L-16 through L-19, stockpiling within Lagoons L-9 through L-12, and placement of an interim cover, as needed. The inactive Lagoons L-16 through L-19 (the shoreline lagoons) would then be available for transfer and construction as part of the Shoreline Project. Section 2.5.2 describes Phase 1.
- **Phase 2, Long-Term Consolidation.** Removal of the legacy biosolids from the remaining lagoons, consolidation within the long-term consolidation area (described in greater detail in Section 2.5.3), and construction of an erosion-resistant cap. The City would monitor the integrity of the cap, as described in Section 2.6.

Inactive Lagoons L-4, L-8 and the western two operational cells of L-25 are not included in the cleanup and closure plan because no legacy biosolids remain in these areas.[13]

Mitigation measures were adopted by the City Council on November 19, 2013 as part of the mitigation monitoring and reporting program (MMRP) for the Plant Master Plan EIR. **Appendix B** includes the City Council adopted mitigation measures . Chapter 3, *Environmental Setting, Impacts, and Mitigation Measures,* identifies the relevant mitigation measures that will be required for the Project. For the purposes of this addendum, the mitigation measures in Appendix B are considered parts of the Project, except that, as shown in Chapter 3,

[13] Lagoon L-25 is divided into four "operational cells." The Project area includes the two eastern operational cells. Biosolids are not present in the two western operational cells, which is why they are excluded from the Project area.

Environmental Setting, Impacts, and Mitigation Measures, in some cases the PMP EIR's mitigation measures have been revised or augmented to reflect current conditions and to address project-specific and site-specific impacts. The adjusted mitigation measures are equal or more effective measures and do not change the original impact conclusions from the Plant Master Plan EIR, nor are they considerably different from that analyzed in the Plant Master Plan EIR.

Table 2-2 summarizes project implementation.

TABLE 2-2
PROJECT IMPLEMENTATION

Phasing	Steps
Phase 1 – Interim Consolidation	1. Clear vegetation in L-9 through L-12 and L-16 through L-19 2. Move biosolids from L-16 through L-19 to the interim consolidation area (L-9 through L-12) 3. Install interim cap on consolidated biosolids within L-9 through L-12, if needed [a] 4. Transfer L-16 through L-19 to Shoreline Project partnering agencies
Phase 2 – Long-Term Consolidation	1. Clear vegetation within selected long-term consolidation area[b], if present 2. Clear vegetation from remaining biosolids lagoons [c] 3. Move biosolids from remaining biosolids lagoons[c] to long-term consolidation area 4. Implement drainage control (grading, potential piping) in remaining biosolids lagoons (e.g., potential piping adjacent to Lagoons L-1 to L-3, L-5 to L-7)

NOTES:

[a] An interim cap might be needed depending on how long biosolids would be temporarily consolidated in Lagoons L-9 through L-12 prior to long-term consolidation, the need for an interim cap to be confirmed based on discussions with the RWQCB.

[b] The long-term consolidation area would require an approximately 30-acre area based on current estimates of the biosolids volume and engineering properties. Locations within the lagoons that may be of sufficient size to accommodate the total volume of legacy biosolids include: 1) L-9 through L-12; 2) L-1 through L-3 and L-5 through L-7; or 3) L-13 through L-15 and L-20.

[c] "Remaining biosolids lagoons" refers to the lagoons within the Phase 2 lagoons area that are not within the selected consolidation area.

SOURCE: Cornerstone, 2019. *Closure Alternatives Analysis Plan, Legacy Biosolids Lagoons, San José/Santa Clara Regional Wastewater Facility*, September 25.

As discussed in **Appendix A**, the Department of Toxic Substances Control and the RWQCB have agreed that the RWQCB will act as the primary agency for overseeing cleanup and closure of the Project site. The City is designing the Project to be consistent with requirements of the RWQCB Order. RWQCB's oversight of the investigation and remediation of the legacy biosolids is designed to ensure protection of the environment and human health during and after construction activities in the inactive lagoons, which would substantially meet the requirements of Plant Master Plan Mitigation Measure HAZ-1d (Coordination with Regulatory Agencies).

2.5.2 Phase 1 Interim Consolidation

Phase 1 interim consolidation would consist of site preparation, removal of approximately 157,000 cubic yards of legacy biosolids within Lagoons L-16 through L-19, stockpiling the

removed legacy biosolids within Lagoons L-9 through L-12, placement of an interim cap if needed, and transfer of Lagoons L-16 to L-19 as part of the Shoreline Project.

Site Preparation

Site preparation activities would include vegetation removal; placement of fencing for site security; and establishment of exclusion, decontamination, and staging areas.

Vegetation Removal

All inactive biosolids lagoons contain non-tidal salt marsh habitat. Wildlife species that use non-tidal salt marsh include (among others) salt marsh harvest mouse (*Reithrodontomys raviventris*), a federal endangered species and a State endangered species. Vegetation removal and grading would be conducted in accordance with adopted measures to mitigate impacts on sensitive habitat, including Mitigation Measure BIO-2c: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures (refer to Appendix B for the text of this and other mitigation measures adopted for the Project).

Site Security

Access to the project area is currently restricted. Access to the project area would be further restricted through installation of additional fencing as needed, and access to the site would be limited to authorized personnel.

Exclusion, Decontamination, and Staging Areas

Construction staking, fencing, barricade, and/or caution tape would be used to define access corridors and exclusion areas within and along the border of the project site.

A decontamination zone or zones within the project site would be established prior to initiation of biosolids removal activities. The decontamination zone or zones on site would include designated areas for the removal of biosolids from equipment, transportation vehicles, and personnel leaving active work areas within the project site. A gravel decontamination pad would be established near the construction exit, and biosolids materials would be removed from the equipment and vehicles before leaving the site. Decontamination procedures would remove biosolids by either dry or wet methods. Dry methods are the primary means of decontamination and consist of brushing and scraping of equipment to remove soil. If dry methods are not effective, wet methods may be used, such as steam cleaning or pressure washing. Water used for onsite decontamination would be collected and stored in onsite storage containers (drums or closed-top tanks) provided by the Contractor. Wastewater would be analyzed and disposed of at the Facility or an offsite permitted disposal facility. The decontamination zone or zones would likely be located near the staging area and/or at the very least outside environmentally sensitive areas, protecting biological and water resources. Final locations of the decontamination zone or zones will be determined by the contractor, in consultation with the Environmental Services Department and relevant qualified professionals, such as qualified biologists and water quality specialists.

A staging area located adjacent to the main access point, south of Lagoon L-3 and north of Los Esteros Road, would be established. Aggregate base would be placed on the existing access roads to stabilize and reduce potential erosion of the roads.

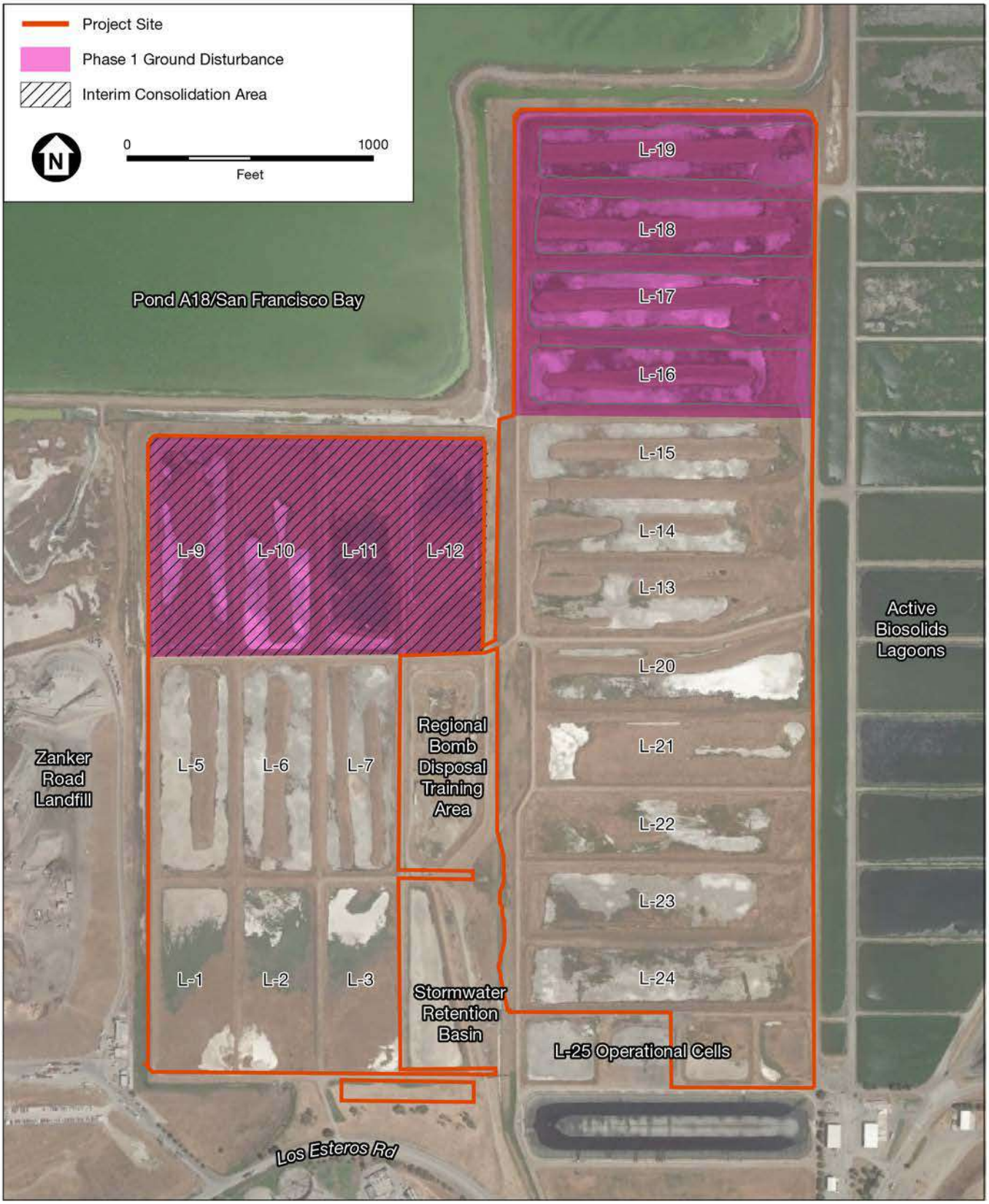
Removal of Biosolids from Lagoons L-16 through L-19 and Stockpiling in Lagoons L-9 through L-12

The legacy biosolids excavation work would begin after completion of vegetation removal, consisting primarily of pickleweed. Biosolids material in Lagoons L-16 to L-19 will be removed and stockpiled within Lagoons L-9 through L-12, as shown on **Figure 2-6**. Construction equipment would access the biosolids from the surrounding berms and using existing access roads. Biosolids removal would continue until the City's hired geologist has verified that all biosolids material is removed from Lagoons L-16 to L-19. Based on field observations, the biosolids material is easily distinguished visually from underlying native material due to the green-white color of the biosolids. As such the material at the base of each lagoon will be visually assessed to determine if additional excavation is required for biosolids removal. The field observations would be documented on daily field reports and photographed. The removal action within each lagoon will extend approximately 0.5 to 1 foot below the existing lagoon bottoms, to remove the full vertical extent of the biosolids.

Dust monitoring would occur during legacy biosolids removal if excessive dust is observed, complaints are received, or if requested by the City or other project personnel. If dust monitoring is performed in response to a complaint or visible emissions, monitoring would occur until the results document that dust control measures are effective in controlling dust emissions. The City or its contractor would also monitor work areas on an as-needed basis for methane and hydrogen sulfide concentrations[14], and apply odor masking agents for odor control if needed. Odors have the potential to be most prevalent when the biosolids are moved. Minimizing odors would be accomplished by applying a deodorant, masking agent, or neutralizing agent, and covering the biosolids at the end of the working day with soil or a geosynthetic material (Cornerstone Earth Group, 2020). Similar to existing biosolids operations in the active biosolids lagoons[15] a water truck would also be run during hauling to keep dust at a minimum, and odor neutralizing chemicals would be added to the water. A storm water pollution prevention plan including construction best management practices to control and prevent stormwater runoff would also be implemented during Phase 1.

[14] If methane and/or hydrogen sulfide emissions are detected or suspected, the contractor would monitor the work area using a meter capable of measuring methane and hydrogen sulfide concentrations.

[15] Under current operations, the stockpiling, hauling, and removal of biosolids occurs between July and October. Odor impacts are the greatest during this process when piles are turned and loaded into trucks to be hauled. A water truck is run 8-10 hours a day during hauling season to keep odors and dust at a minimum. Odor neutralizing chemicals are added to the water. In addition, a mobile water mister is used to reduce odors. (Carollo Engineers, *San José/Santa Clara Water Pollution Control Plant Master* Plan *Project Memorandum No. 5, Odor Treatment Alternatives, Final Draft.* September 2011.)



SOURCE: ESA, 2020; Google Earth, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-6
Phase 1 Interim Consolidation

ESA

After completion of the biosolids material removal, Lagoon L-16 to L-19 bottom elevations will be approximately at 2-3 feet mean sea level. The existing berms surrounding and within Lagoons L-16 to L-19 will not be removed or graded during Phase 1. The maximum elevation of the temporarily stockpiled legacy biosolids in Lagoons L-9 through L-12 would be 10.5 feet, which is lower than the shortest surrounding berm (approximately 14 feet), shown on **Figure 2-7**.

Interim Cap

An interim cover or cap may be placed on top of the biosolids material consolidated during Phase 1. The need for an interim cover would be confirmed by RWQCB. If needed, the interim cover would consist of material generated from the interior berms between Lagoons L-9 through L-12. Interim cover material may also be imported from an offsite source if needed, provided it is approved by the RWQCB. Alternatively, the City may elect to place an interim cap with a design consistent with that of the final cap discussed in Section 2.5.3, Phase 2 Long-Term Consolidation. The City would monitor the interim cap for erosion, subsidence, ponded water, voids, cracks, or other deficiencies until Phase 2 begins. The surface of the capped area would be stabilized as needed to prevent wind or water erosion; additional storm water controls are not anticipated. Existing berms surrounding Lagoons L-9 through L-12 will serve as a measure to prevent discharge of surface water runoff from consolidated biosolids material.

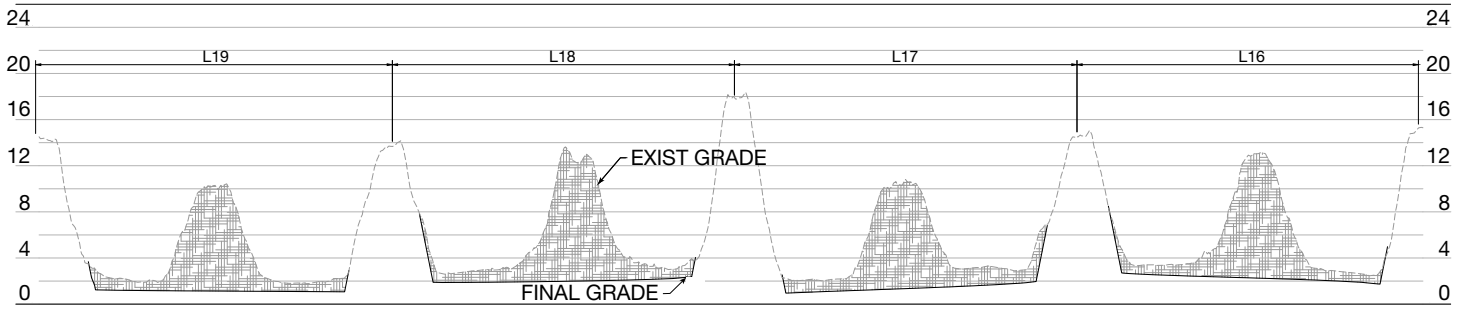
Transfer of Lagoons L-16 through L-19

After legacy biosolids removal, the approximately 35-acre area of Lagoons L-16 to L-19 would be transferred from the City's ownership to become part of the Shoreline Project. Upon transfer, the City assumes that Valley Water would take ownership of shoreline lagoons as local sponsor of the Shoreline Project.

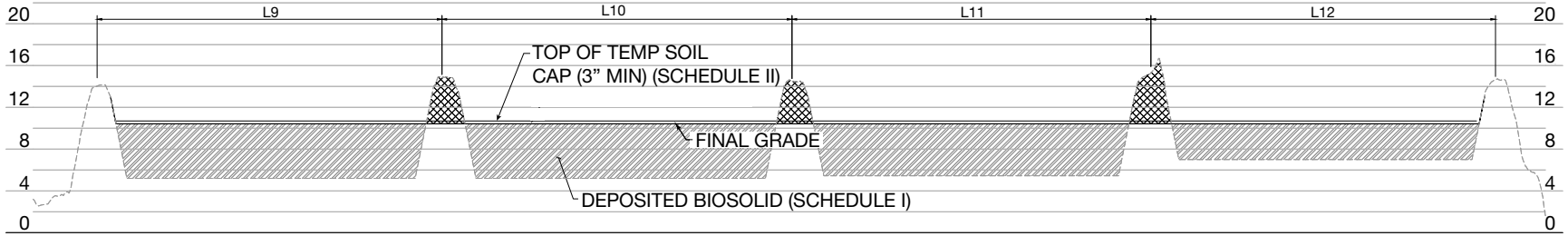
The levee alignment of the Shoreline Project may move to the south side of Lagoon L-16 instead of the "stair-step" around the lagoons as currently included in the Shoreline Project. A potential alignment is shown as a thick dashed yellow line on Figure 2-5. The shoreline levee would be located on the inland side of Lagoons L-16 through L-19, and as part of the Shoreline Project areas of the lagoons outboard of the levee would be restored to tidal marsh or transitional habitat, as is proposed for the rest of Pond A18 under the Shoreline Project.

2.5.3 Phase 2 Long-Term Consolidation

Phase 2 long-term consolidation would consist of additional site preparation; excavation of the remaining legacy biosolids in the Phase 2 lagoons area shown on Figure 2-8; consolidation of all legacy biosolids within one consolidation area within the Phase 2 lagoons area; and placement of an erosion-resistant cap on the consolidation area.



TYPICAL SECTION CUT
L19 TO L16



TYPICAL SECTION FILL
L9 TO L12

LEGEND

- BIOSOLID REMOVAL
- TEMPORARY BISOLID STOCKPILE
- BERM MATERIAL TO BE REUSED FOR TEMPORARY SOIL CAP

SFO\13xxxx\D131002.26 - Legacy Lagoons Cleanup\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Kimley Horn, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-7
Phase 1 Interim Consolidation Cross Section

ESA

Site Preparation and Biosolids Stockpiling

Prior to any relocation of biosolids into the consolidation area, the City would remove vegetation and grade the consolidation area, creating a flat work area by removing the existing biosolids windrows and berms and either compacting the material in place or stockpiling temporarily in the Phase 2 lagoons area for later use. Any biosolids material stockpiles would be within an existing lagoon and would not be stockpiled on the berms or interior roadways or outside the Phase 2 lagoons area. Any temporary stockpile would not extend above the top of the surrounding berms, and dust control or other stabilization measures would be implemented on any temporary stockpiles, as necessary, similar to what is described above for Phase 1. Vegetation removal would occur throughout each lagoon as described in Phase 1 above (including implementation of Mitigation Measure BIO-2c, Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures in **Appendix B**). If present, the fill berms located within the consolidation area would be removed and temporarily stockpiled within the Phase 2 lagoons area for later use based on qualified engineer recommendations. The biosolids material would be graded evenly across the consolidation area.

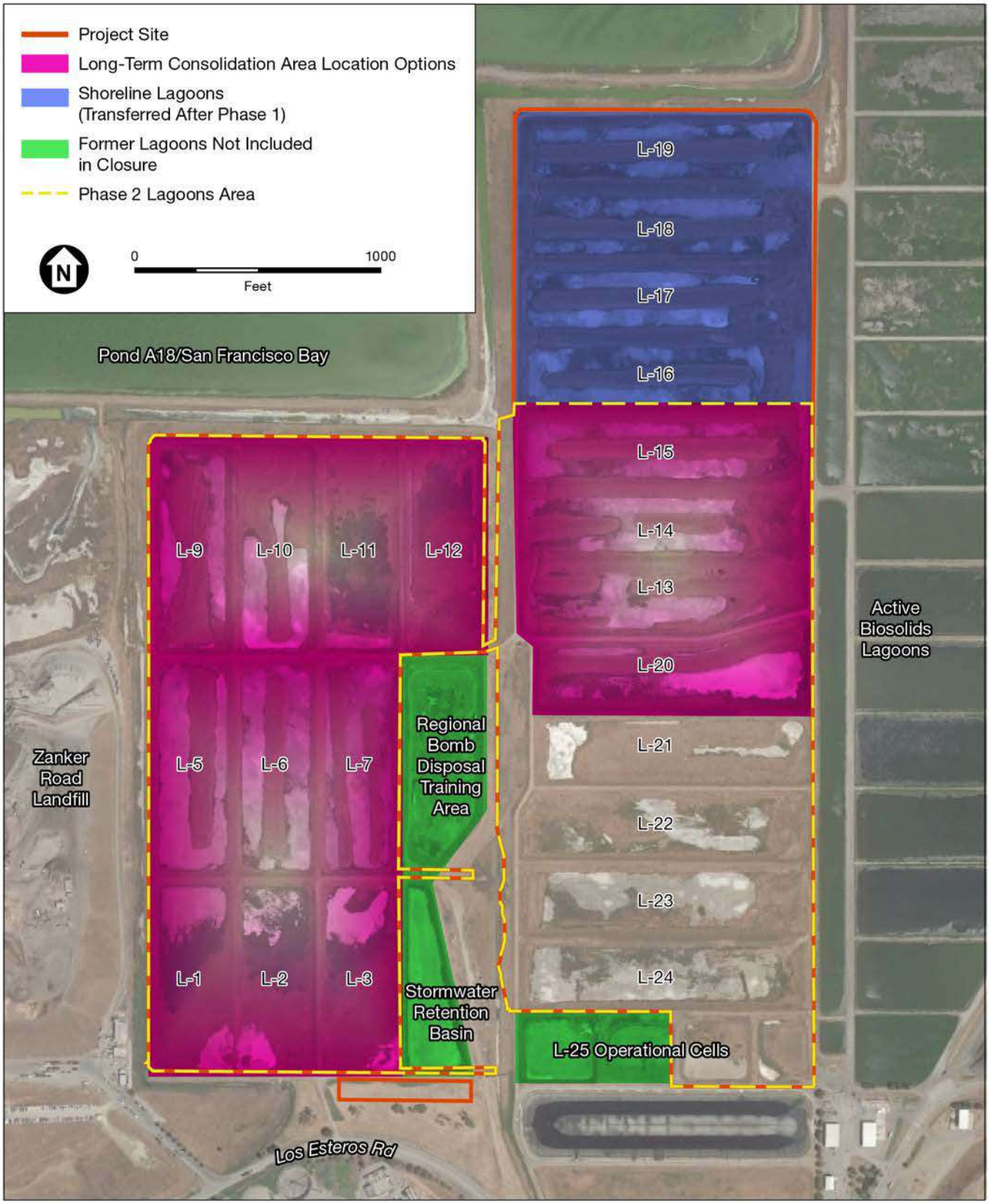
Excavation of Remaining Biosolids and Consolidation

The procedure for the movement of material during Phase 2 will be the same as performed in Phase 1. After vegetation removal, legacy biosolids would be excavated from the remaining lagoons. Removal completeness would be visually assessed, and dust and stormwater controls would be implemented.

During Phase 2, the City would consolidate all of the biosolids into one long-term consolidation area within the Phase 2 lagoons area shown on Figure 2-8. The long-term consolidation area would require an approximately 30-acre area (or "consolidation area footprint") based on current estimates of the biosolids volume and engineering properties. However, the City's engineers would observe the physical properties of the legacy biosolids during Phase 1, and may recommend a maximum height for the consolidation area that requires expansion of the consolidation area footprint. The City may consolidate legacy biosolids in Lagoons L-9 through L-12, as consolidation in that location would eliminate the need to handle legacy biosolids more than once. If a larger area is needed, another location within the Phase 2 lagoons area may be used. Other locations within the Phase 2 lagoons area that may be of sufficient size to accommodate the total volume of legacy biosolids are:

- Lagoons L-1 through L-3 and L-5 through L-7 (approximately 40 acres)
- Lagoons L-13 through L-15 and L-20 (approximately 30 acres)

Figure 2-8 illustrates the Phase 2 lagoons area and locations of sufficient size within it for long-term consolidation.



SOURCE: ESA, 2020; Google Earth, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-8
Phase 2 Long-Term Consolidation

ESA

Consolidation Area Cap

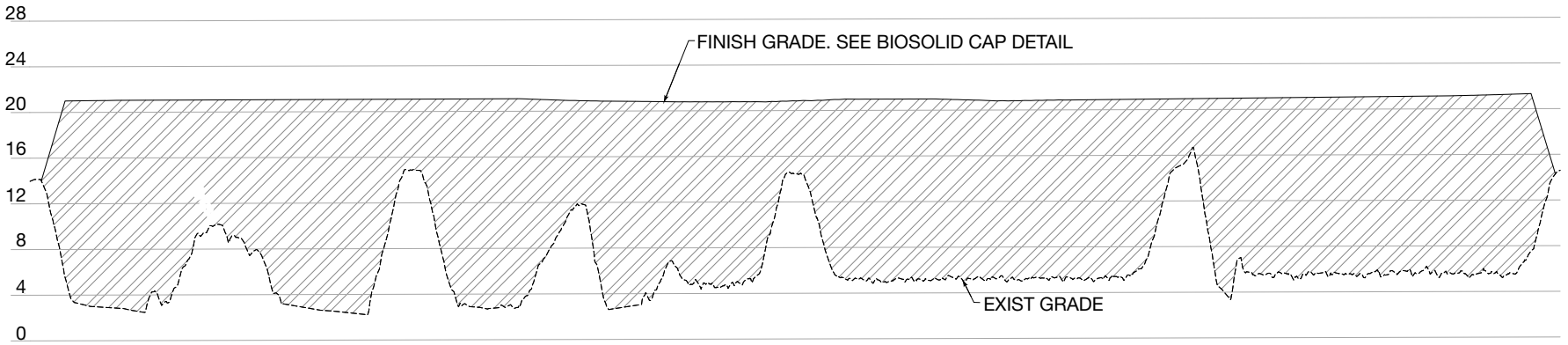
After all legacy biosolids are transported to the long-term consolidation area (completion of Phases 1 and 2), the material would be capped with a foundation layer, a low conductivity layer, and an erosion resistant layer, consistent with requirements of the RWQCB Order. The existing berm material within the inactive lagoons may be utilized in the foundation and erosion resistant layers. The berm material could also be used in the low-hydraulic conductivity layer provided it meets the required maximum permeability specified for this layer. Alternatively, if the existing berm material does not meet RWQCB requirements or is otherwise unavailable, the cap material would be imported from an offsite source approved by the City and RWQCB. Figure 2-9 illustrates the conceptual consolidation area cross-section for Lagoons L-9 through L-12. The final cap layers would consist of the following:

- **Foundation Layer**. A minimum of 2 feet of appropriate materials as a foundation layer for the final cover that can consist of berm material or material imported from an offsite source provided the material meets the minimum geotechnical requirements and is approved by the RWQCB.
- **Low-Hydraulic Conductivity Layer.** A minimum of 1-foot thick compacted layer having a maximum permeability of approximately 1 x 10^{-6} centimeters per second (cm/s).
- **Erosion-Resistant Layer.** A minimum of 1-foot thick vegetative layer, suitable to support vegetation. The berm material likely could be used in this layer. Alternatively, soil from an approved offsite source can be used.

The cap surface would be graded to prevent water ponding on the surface, and the side slopes will be graded in accordance with the Civil Engineer's design but will not exceed a slope of 1.75:1 (horizontal to vertical). The consolidated biosolids are anticipated to extend to an elevation of approximately 30 feet (MSL), which is approximately 15 feet above the top of existing berms. The final design would include a grading and drainage plan that meets pertinent stormwater regulations.

2.5.4 Interim Management

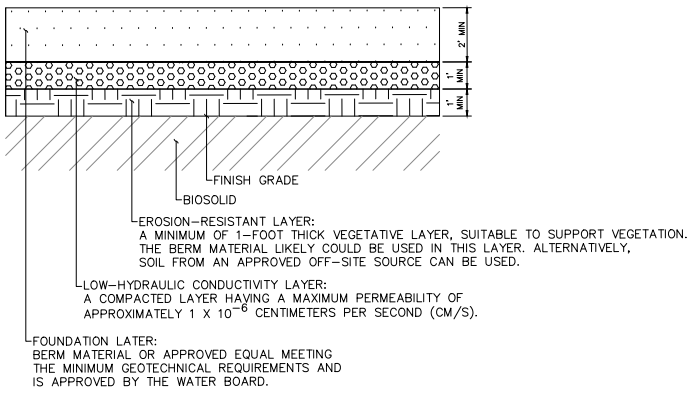
The City would implement interim land management activities for lagoons within the Phase 2 consolidation area that have undergone clean-up but before a long-term use has been implemented. The City may conduct a drainage assessment that would document and map the existing water and drainage features and flow contours for the Phase 2 lagoons area. Two 48-inch pipelines may also be installed to drain the southwestern area of the Project site (Lagoons L-1 to L-3 and L-5 to L-7), which would outlet to the Eastern Drainage Channel. The remaining lagoons would be properly graded and compacted such that stormwater drains away from, and does not pond on, areas that may be used for future Facility operations. The City would also install erosion control features.



TYPICAL SECTION D-D
CONSOLIDATION PILE
L9 TO L12

LEGEND

- BIOSOLID REMOVAL
- BISOLID STOCKPILE
- CUT
- FILL



BIOSOLID CAP DETAIL

SOURCE: Kimley Horn, 2019

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-9
Consolidation Area Cross Section

ESA

Long Term Uses

The City has not identified specific future long-term uses of the remaining lagoons beyond those identified in the Plant Master Plan at this time. Consequently, long-term uses are not part of the proposed Project described and evaluated in this document. Definition and evaluation of long-term uses would occur at a later date under a separate Project.

2.6 Operations and Maintenance

2.6.1 Post-Closure Monitoring

Post-closure monitoring of the consolidated area would include periodic (for example, quarterly) and/or annual visual observations, cap maintenance, inspection following significant rain events and/or earthquakes, notification for planned and unplanned work that may penetrate the cap, training for persons performing the inspections, and reporting/record keeping. The purpose of post-closure monitoring would be to help confirm the integrity of the engineered cap installed over the consolidated biosolids. Post-closure monitoring is expected to consist of cap inspections and surface monitoring for methane. No additional staff would be needed to conduct monitoring and maintenance of the cap.

2.6.2 Inactive Lagoons Operations and Maintenance

Maintenance activities of the inactive lagoons would include mowing and trimming of the vegetation between one and four times per year, depending on precipitation. Mowing is typically completed by four staff members over a two-week period. No additional staff would be needed to maintain the remaining lagoons.

2.7 Construction Schedule and Process

2.7.1 Construction Schedule and Quantities

Project construction would require approximately two and a half years, from 2020 through 2022.[16] **Table 2-3** shows the estimated construction schedule and duration by activity. Proposed typical construction hours for the Project would be Monday through Saturday, 7:00 am to 4:00 pm. However, the selected contractor may be required to work on Sunday, during extended hours, or at night.

Table 2-4 summarizes construction information relevant to the Project. A total of approximately 570,000 cubic yards of legacy biosolids would be excavated for the Project. An additional approximately 100,000 cubic yards of berm material would be excavated and regraded onsite. The City would import approximately 170,000 cubic yards of material for cap construction. No dewatering would be required during construction. As discussed in Section 2.5.2, the Project would cap materials in place; no material would be hauled offsite. All material would either be

[16] For purposes of this discussion it is assumed that construction would be completed by 2022 or otherwise consistent with the Shoreline Project's construction schedule and planned activities in the project vicinity. If the City or the Shoreline Project encounter unanticipated delays, Phase 2 construction may be completed later than shown.

hauled to the onsite consolidation area or stockpiled onsite. No trees would be removed for the Project. Temporary nighttime lighting may be required for Project construction.

TABLE 2-3
CONSTRUCTION SCHEDULE

Activity	Expected Duration (calendar days)	Estimated Schedule
Phase 1		
Hand Removal of Vegetation (Lagoons L-9 to L-12 and L-16 to L-19)	20	July 2020
Excavation of biosolids from L-16 to L-19 and transport to L-9 to L-12	150	July 2020-December 2020
Transfer of Lagoons L-16 through L-19 for use in Shoreline Project, deadline from RWQCB Order	*n/a*	*January 2021*
Interim Cap Erosion Control	30	January 2021-February 2021 (outside limits of L16-L19)
Phase 2		
Hand Removal of Vegetation from Phase 2 lagoons	25	May 2021
Excavation of biosolids from remaining lagoons and transport to consolidation area, cap placement	192	May 2021-September 2021; May 2022-July 2022
Final grading of remaining Phase 2 lagoons	112	May 2022-December 2022
Potential Drainage Installation (adjacent to Lagoons L-1 to L-3, L-5 to L-7)	8	December 2022
Erosion Control	8	December 2022
RWQCB Order Cleanup Deadline		*November 2023*
Total		**July 2020 – December 2022***

NOTES:

* If the City or the Shoreline Project encounter unanticipated delays, Phase 2 construction may occur later than shown.

SOURCE: Cornerstone and Kimley Horn, 2019.

TABLE 2-4
CONSTRUCTION INFORMATION BY PHASE

Construction Quantity	Phase 1	Phase 2
Maximum Depth of Excavation at Project Site	12 feet below existing berm tops (elevation 1 feet)	12 feet below existing berm tops (elevation 1 feet)
Excavation Volume (cubic yards)	157,000	513,000
Construction Water Volume (gallons per day)	4,000	4,000
Construction Water Source	City-owned hydrants	City-owned hydrants
Maximum Offsite Haul Truck Trips per Day	52	166
Maximum Construction Workers per Day	20	32

SOURCE: Appendix C.

2.7.2 Construction Staging and Access

Much of the Project area would be disturbed during construction. **Figure 2-10** illustrates the areas of ground disturbance during Phases 1 and 2. Phase 1 would disturb approximately 65 acres; approximately 105 acres would be disturbed in Phase 2. During Phase 1, excavation and placement of biosolids would occur within the limits of the existing lagoons, and the roads on top of the berms surrounding the lagoons would be used for contractor access. **Figure 2-11** illustrates the proposed haul truck access routes to the consolidation area from the surrounding lagoons, using existing access roads. In addition to areas within the Project site footprint, construction staging would also occur south of the Project site in the 1.2-acre area shown on Figure 2-9. Construction workers would park within the Project area or the adjacent staging area.

2.7.3 Construction Workforce and Equipment

The size of the construction workforce would equate to approximately 10 to 64 personal vehicle trips per day (i.e., commute trips of 5-32 workers), with a maximum of 64 vehicle trips per day (i.e., 32 workers). Up to 166 truck trips per day would occur during Phase 2 for delivery of the cap material to the project site. **Table 2-5** lists the construction equipment that would be used during Phases 1 and 2. Refer to Appendix C for detailed construction equipment information.

The construction process and equipment utilized would consist of the following:

- Vegetation removal would be completed using hand tools.
- Legacy biosolids would be removed from the lagoons using bulldozers, excavators, a compactor, and a front loader. The individual legacy biosolids lagoons are divided by approximately 15-foot wide unpaved roadways located on top of the berms. These roadways would serve as the routes for the onsite equipment to access the individual lagoons during the consolidation work. There may be some ramping also for access using the exiting berm material for ingress/egress to the lagoon bottoms.
- The removed legacy biosolids would be hauled to the consolidation area by dump trucks.
- The legacy biosolids would be placed in the consolidation area using the same type of equipment used to remove the biosolids, in accordance with geotechnical recommendations.

TABLE 2-5
CONSTRUCTION EQUIPMENT

Equipment	Construction Purpose
Bulldozer / Loader	earthwork construction + clearing and grubbing
Dump Truck	biosolids material transport
Excavator	soil manipulation
Front-end Loader	dirt or gravel manipulation
Grader	ground leveling
Haul Truck	earthwork construction + clearing and grubbing
Roller/Compactor	earthwork construction
Scraper	earthwork construction + clearing and grubbing
Sweeper	earthwork construction
Water Truck	earthwork construction + dust control

SOURCE: Appendix C, Legacy Biosolid Lagoon Construction Duration and Equipment Usage.

SOURCE: ESA, 2020; Google Earth, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-10
Phase 1 and Phase 2 Activity Areas

ESA

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SOURCE: ESA, 2020; Google Earth, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 2-11
Construction Staging and Access

ESA

2.8 Required Actions and Approvals

The Project is expected to require the following regulatory permits and other regulatory approvals. Given the ultimate transfer of certain lagoons to the Shoreline Project, additional coordination between the two projects is likely required.

- U.S. Army Corps of Engineers Nationwide permit (pursuant to Section 404 Clean Water Act and/or Section 10 Rivers and Harbors Act)
- Regional Water Quality Control Board 401 Water Quality Certification and/or Waste Discharge Requirements and issuance of coverage under the National Pollution Discharge Elimination System, Construction General Permit for stormwater discharges associated with construction activities that disturb more than one acre of land and operational stormwater runoff under Provision C.3 of the Municipal Regional Permit or otherwise consistent with post-closure requirements of the RWQCB.
- Section 7 Consultation with USFWS (Informal Concurrence with Avoidance Measures and a No Take Determination or Biological Opinion) under the Federal Endangered Species Act. Given that the Shoreline Project may be pursuing Section 7 coverage for the Project under their existing consultation, additional coordination with USFWS and the Corps may not be required.
- Section 1600 Lake and Streambed Alteration Agreement from California Department of Fish and Wildlife (CDFW) unless all linear drainage features within and adjacent to the Project site can be avoided during construction activities (including access, staging, hauling)
- Section 2080/2081 Consultation with CDFW (Informal Concurrence with Avoidance Measures and a No Take Determination) under the California Endangered Species Act
- Section 106 Consultation with the State Historic Preservation Office (SHPO) for effects to potential historic resources under the National Historic Preservation Act

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References

City of San José, 2013. San José/Santa Clara Regional Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

City of San José, 2017. CIP Program Study 14 Flow Management Study, July 25, 2017.

Cornerstone Earth Group, 2020. Interim Closure Plan: Phase 1 Biosolids Removal and Consolidation. January 28, 2020.

CHAPTER 3
Evaluation of Environmental Impacts

The evaluations in the Plant Master Plan Environmental Impact Report (EIR) were reviewed to determine whether a Supplemental environmental document was warranted based on refinements to the Legacy Biosolids Lagoons Site Cleanup project (Project). This chapter describes any relevant changes that have occurred in the existing environmental conditions within and near the Project area as well as environmental impacts associated with the Project. The analysis includes consideration of the mitigation measures adopted for the Master Plan as part of the Mitigation Monitoring and Reporting Program (MMRP). **Appendix B**, *Plant Master Plan EIR Mitigation Measures,* contains all of the mitigation measures from the adopted MMRP. As indicated in this chapter, in some cases mitigation measures in Appendix B have been revised or augmented to reflect current conditions and to address Project-specific and site-specific impacts.

The Plant Master Plan EIR evaluated impacts of combinations of individual improvements as they were expected to progress at the time of Plant Master Plan EIR preparation. The phasing for the Master Plan improvements has changed as design progressed for individual improvements. Project construction is expected to overlap with construction of the Headworks Improvements and New Headworks project, the Outfall Bridge Replacement project, and the Digested Sludge Dewatering Facility project. Where relevant, cumulative impacts of this scenario are discussed.

The topics listed below were sufficiently addressed in the Plant Master Plan EIR and required no additional analysis because either the nature, scale, and/or timing of the project has not changed in ways relevant to the resource or there has not been a substantial change in the circumstances involving the resource on the project site, nor in the local environment surrounding the site which would result in new or substantially increased impacts.

- **Aesthetics.** Existing views of the lagoons remain similar to those shown in photos 4, 5, and 12, on Figures 4.15-3 and 4.15-5 of the Plant Master Plan EIR (map of vantage points shown on Plant Master Plan EIR Figure 4.15-1). No new designated scenic vistas or scenic resources have been identified in the Project vicinity. The Project would not construct buildings or structures or install permanent lighting. Temporary lighting used during construction may be visible to passing motorists on Los Esteros and Zanker Roads (which do not have sidewalks), but these public views would be temporary and fleeting. The Project would remove internal berms and construct a consolidation area that would be up to 10 feet taller than the existing external berms; however, this change in topography would not substantially degrade the existing visual character or quality of the site due to the adjacent landfill and mid-range low hills.
- **Agriculture and Forestry Resources.** The state and local land use and zoning designations with respect to agricultural and forest resources have not changed for the site and surroundings, and agricultural or forest use of the site has not commenced since adoption of

the Plant Master Plan EIR. Thus, there has not been a substantial change in the circumstances involving agricultural and forest resources at the site or surrounding areas.

- **Geology, Soils, Seismicity, and Paleontological Resources.** The nature, scale, and timing of the Project have not changed in a manner that would exacerbate existing geologic and seismic hazards at the Project site. Project ground disturbance would be limited to relocation of legacy biosolids, regrading of the underlying young bay mud at the base of the lagoons, and regrading of the existing constructed berms in a previously disturbed area. While the bay mud may contain a variety of marine invertebrate remains and organic matter (mollusks, clams, foraminifera, microorganisms, etc.), such remains are not fossilized, are likely to exist in other Bay Mud deposits all around the Bay Area, and would not be considered significant or unique.
- **Land Use.** The state and local land use plans, policies, and regulations applicable at the site have not materially changed since adoption of the Plant Master Plan EIR in a way that would cause any new, or substantially increase the severity of any previously disclosed impacts on the physical environment. The character of the Project would remain the same.
- **Mineral Resources.** The Plant Master Plan EIR determined that because there are no mineral resources at the Project site, there would be no impact with respect to mineral resources. Mineral resources zoning in the Project area has not changed since adoption of the Plant Master Plan EIR.
- **Population and Housing.** As evaluated in the Plant Master Plan EIR, the Project would not directly affect population and housing because it would not include new homes or businesses and would not displace existing people or houses. The Project's indirect impacts related to population and housing would remain the same as those addressed in the Plant Master Plan EIR.
- **Public Services and Facilities**. The nature of the Project with respect to population growth and impairment of achieving service performance objectives has not changed from what was evaluated in the Plan Master Plan EIR.
- **Recreation.** The Plant Master Plan EIR proposed a mixture of recreational facilities on lands surrounding the Facility's operational area to be developed in partnership with other agencies, and identified impacts related to increasing the use of neighborhood and regional parks or other recreational facilities that could be mitigated to a less-than-significant level. The Project would not require any new staff for operation, and does not include the construction of any recreational facilities. Therefore, there would be no change in impacts related to recreation.
- **Utilities and Service Systems.** The nature of the Project with respect to wastewater collection and treatment, water use, and solid waste disposal has not changed.
- **Wildfire.** As indicated in the Plant Master Plan EIR, the Project site is not within a Very High Fire Hazard Severity Zone. Because the Project site is still not within a Very High Fire Hazard Severity Zone, there would be no change in impacts related to wildfire.
- **Mandatory Findings of Significance.** Section XXI of the CEQA Initial Study Checklist identifies Mandatory Findings of Significance, asking whether a project has the potential to substantially degrade the quality of the physical environment (specifically with regard to adverse effects on biological or cultural resources), could have impacts that are individually limited but cumulatively considerable, or would cause substantial adverse effects on human beings. The Plant Master Plan EIR presented comprehensive consideration of the effects of the Plant Master Plan (including the Legacy Biosolids Lagoons Site Cleanup Project) on the physical and human environment. Where applicable, the analyses in Chapter 3 of this

Addendum includes consideration of cumulative projects (based on their current schedules) and the Project's potential to contribute to significant cumulative impacts. As summarized in Chapter 1 and documented throughout Chapter 3 of the Addendum, mitigation measures identified in the Plant Master Plan EIR have been incorporated into the Project and the Project would not result in any new significant impacts not previously disclosed in the circulated EIR; nor would it result in a substantial increase in the magnitude of any significant environmental impact previously identified. Consequently, the effects of the Project on the physical and human environment and with respect to cumulative projects are not anticipated to differ substantively from the those described in the Plant Master Plan EIR and conclusions regarding mandatory findings of significance are the same.

Changes and additions to the Plant Master Plan EIR discussion of the remaining topics are included below, pursuant to CEQA Guidelines Section 15164. The following discussion analyzes the impacts of the Project to determine: (1) if the project, circumstances under which the project is undertaken, or new information (which could not have been ascertained at the time of the preparation of the Plant Master Plan EIR) would lead to new or more severe significant environmental effects from what was identified in the Plant Master Plan EIR; (2) if newly feasible or different mitigation measures or alternatives are available that would substantially reduce one or more significant effects of the project; and (3) if the mitigation measures identified in the Plant Master Plan EIR and/or newly added mitigation measures would reduce impacts to a less than significant level.

These additions do not reflect involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; for these reasons, a subsequent EIR was not prepared.

3.1 Air Quality

3.1.1 Setting

The air quality setting relevant to the Project site, including applicable regulations and air quality conditions, has not appreciably changed since the certification of the Plant Master Plan EIR. The updates associated with the changes to the applicable air quality plan and standards for ambient concentrations of air pollutants are further discussed below.

Environmental Setting

The Project site is located in the San Francisco Bay Area Air Basin under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The Bay Area experiences occasional violations of ozone and particulate matter (PM10 and PM2.5) standards. Therefore, the Bay area currently is designated as a non-attainment area for violation of the state 1 hour and 8-hour ozone standards, the federal ozone 8-hour standard, the state respirable particulate matter (PM10) 24-hour and annual average standards, the state fine particulate matter (PM2.5) annual average standard, and the federal PM2.5 24-hour standard. The Bay area is designated as attainment for all other state and federal standards (BAAQMD, 2017b).

From an air quality standpoint, sensitive receptors are defined as facilities and land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and daycare centers. Residential areas are also considered sensitive to poor air quality because people usually stay home for extended periods of time, which results in greater exposure to ambient air quality. Sensitive receptors, as identified and discussed in the certified Plant Master Plan EIR, have not changed and remain applicable to the Project. There are no sensitive receptors (e.g., residences, schools) adjacent to or in the immediate vicinity of the Project area, and no hospitals, daycare centers, or long-term care facilities within one mile of the Project area. The closest sensitive uses are residences located approximately 4,500 feet (0.85 miles) southwest of the Project site in the community of Alviso and further away at approximately 6,600 feet (1.25 miles) to the east and south. The closest school is the George Mayne Elementary School located approximately 7,000 feet to the southwest.

Regulatory Setting

Federal and State

The Federal Clean Air Act and the California Clean Air Act both require the establishment of standards for ambient concentrations of air pollutants, called Ambient Air Quality Standards (AAQS).

Local

The BAAQMD maintains regional authority for air quality management in the San Francisco Bay Area (Bay Area) which includes the Project area and vicinity. At the time of certification of the Plant Master Plan EIR, the BAAQMD's 2010 Clean Air Plan (2010 CAP) was the applicable air quality plan in place to protect public health and climate in the Bay Area. In 2017, the *2017 Bay Area Clean Air Plan* (2017 CAP) was adopted to address nonattainment issues for the Bay Area. The 2017 CAP provides a regional strategy to protect public health and protect the climate by continuing progress toward attaining all state and federal air quality standards; eliminating health risk disparities from exposure to air pollution among Bay Area communities; transitioning the region to a post-carbon economy needed to achieve greenhouse gas (GHG) reduction targets for 2030 and 2050; and providing a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets. The 2017 CAP includes a wide range of control measures designed to decrease emissions of air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion (BAAQMD, 2017a).

The BAAQMD *CEQA Air Quality Guidelines,* adopted in 2010 and amended in 2011 and again in 2017 (BAAQMD, 2017c), assist in the evaluation of air quality impacts of projects and plans proposed within the SFBAAB. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and greenhouse gas emissions. The analysis presented below is based on the BAAQMD's 2017 thresholds to evaluate the Project's impacts on air quality.

Criteria Air Pollutants

The primary health concern with exposure to NOX emissions is the secondary formation of ozone. As the amicus curiae briefs submitted for the Sierra Club v. County of Fresno case suggested, and as was stated above, because of the complexity of ozone formation, and given the state of environmental science modeling in use at this time, it is infeasible to determine whether, or to what extent, a single project's precursor (i.e., NOX and ROG) emissions would potentially result in the formation of secondary ground-level ozone and the geographic and temporal distribution of such secondary formed emissions. Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by Project level NOX or ROG emissions. Notwithstanding these scientific constraints, the disconnect between Project level NOX emissions and ozone-related health impact cannot be bridged at this time.

3.1.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of the Plant Master Plan. The Plant Master Plan EIR identified the following impacts related to air quality:

- Less-than-significant impacts related to implementation of the Master Plan for the potential to violate air quality standards during operation, exposure of sensitive receptors to substantial pollutant concentrations, and objectionable odors.
- Significant and unavoidable impacts related to implementation of the Master Plan for the potential to conflict with the applicable air quality plan and for the potential to violate air quality standards during construction as project-related construction emissions, even with mitigation measures incorporated, were found to exceed the identified significance thresholds.

Issues	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. **Would the project:**					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒	☐
b) 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?	☐	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒	☐

Discussion

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

Construction

The Plant Master Plan EIR concluded that construction of the Plant Master Plan would conflict with the BAAQMD's 2010 Clean Air Plan because average daily emissions of NOx from construction equipment and vehicles would exceed the thresholds set by the BAAQMD and accounted for in the 2010 Clean Air Plan.

As discussed in Section 3.3.1, a new air quality plan, the 2017 Clean Air Plan was adopted after certification of the Plant Master Plan EIR. The BAAQMD CEQA Guidelines recommend that a project's consistency with the current air quality plan be evaluated using the following three criteria:

a. Does the project support the primary goals of the air quality plan,

b. Does the project include applicable control measures from the air quality plan, and

c. Does the project disrupt or hinder implementation of any air quality plan control measures.

If it can be concluded with substantial evidence that a project would be consistent with the above three criteria, then the BAAQMD considers it to be consistent with air quality plans prepared for the Bay Area (BAAQMD, 2017b).

The primary goals of the 2017 CAP are to attain air quality standards, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect the climate. The BAAQMD-recommended guidance for determining if a project supports the goals in the current air quality plan is to compare estimated project emissions with the BAAQMD's thresholds of significance. If project emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 CAP. As indicated in the following discussion with regard to air quality checklist item b), the Project would result in construction ROG and NOx emissions that would exceed the BAAQMD's significance thresholds.

As shown in **Table 3.3-1** below, implementation of Plant Master Plan EIR **Mitigation Measures AQ-1: BAAQMD Basic Control Mitigation Measures and AQ-2: BAAQMD Additional Control Mitigation Measures** (i.e., the BAAQMD basic and additional construction mitigation measures listed under checklist item b) would not reduce Project-related NO_X emissions to below the significance threshold. Use of engines meeting the U.S. EPA's Tier 4 Final standards in all construction equipment as Best Available Control Technology for off-road construction equipment and would significantly reduce ROG, NO_x, and PM emissions. However, the reductions would not be adequate to bring Project NOx emissions below the BAAQMD significance threshold of 54 pounds per day. Therefore, this impact is considered significant and unavoidable, same as identified in the Plant Master Plan EIR. **Same as Approved Project. (Significant Unavoidable)**

Operation

Upon completion of construction activities, the Project would not include any new stationary sources of emissions. The only emissions generated would be from the few maintenance-related vehicle trips for periodic and/or annual observations for cap maintenance conducted by existing staff and equipment used for maintenance activities such as mowing and trimming of the area. Emissions generated from these intermittent operational and maintenance activities would be minimal and well below the BAAQMD's operational significance thresholds. Hence, they and are not expected to conflict with long-term regional air quality planning or conflict with the implementation of the 2017 CAP. This would be a less-than-significant impact. **(Less than Significant)**

b) *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?*

The Project was evaluated at a program level in the Plant Master Plan EIR as Improvement B1 – Rehabilitation of Inactive Lagoons. The Plant Master Plan EIR disclosed significant and unavoidable impacts related to the potential to conflict with an applicable air quality plan and potential to violate air quality standards during construction of program level improvements, including the Project. Therefore, the contribution of the approved Plant Master Plan to cumulative air quality was also considered significant. Note that emissions estimates were not prepared for Improvement B1 (or two other program-level improvements) due to uncertainty associated with its implementation.

The Plant Master Plan EIR concluded that implementation of the Plant Master Plan improvements would result in a less than significant impact related to long-term generation of operational criteria pollutant emissions.

The Project's individual contribution to the cumulative air quality of the area has been evaluated below by comparing its construction and operational emissions to the applicable BAAQMD thresholds.

Construction

Construction activities associated with the Project would involve use of equipment that would emit exhaust containing ozone precursors (reactive organic gases or ROG, and nitrogen oxides, or NO_x). On-site and off-site vehicle activity associated with material transport and construction worker commutes would also generate emissions. Emission levels for these activities would vary depending on the number and types of equipment used, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NO_x from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during Project construction.

Air pollutant emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ generated by off-road construction equipment (e.g., excavators, graders, loaders) as well as on-road vehicles associated with worker commute trips, material delivery and hauling truck trips were estimated using the most recent version of the California Emissions Estimator Model (CalEEMod version 2016.3.2) along with Project-specific construction schedule and equipment needs for Project construction. CalEEMod defaults were used when Project-specific information was not available. **Appendix C** identifies equipment usage during construction. **Appendix D** presents all assumptions, model outputs and calculations used to estimate the Project's construction emissions.

Project construction is expected to take place in two phases:

- Phase 1 would last from July 2020 to December 2020 and would take approximately 132 workdays to complete over a period of approximately 6 months.
- Phase 2 would be completed between May 2021 and December 2022 over a period of approximately 250 workdays.

Average daily construction emissions were estimated by dividing the total construction emissions generated by the Project by the total number of workdays. **Table 3.3-1**

(below) shows estimated average daily emissions in comparison to the BAAQMD thresholds.

As indicated in Table 3.3-1, the average daily construction emissions of ROG and NOx would exceed the BAAQMD's significance thresholds, which are 54 pounds per day. Emissions of PM_{10} and $PM_{2.5}$ would be below their respective thresholds, which are 82 and 54 pounds per day, respectively. Therefore, impacts associated with the potential for construction exhaust emissions to result in or contribute to a violation of an air quality standard would be considered significant.

TABLE 3.3-1
AVERAGE DAILY CONSTRUCTION EMISSIONS (POUNDS/DAY)

Emissions	ROG	NOx	Exhaust PM10*	Exhaust PM2.5*
Project Construction Emissions – Unmitigated	**57.4**	**540.3**	21.8	20.1
BAAQMD Construction Emissions Threshold	54	54	82	54
Significant Impact?	**Yes**	**Yes**	No	No
Project Construction Emissions – After mitigation with Tier 4F equipment	12.8	**62.9**	1.7	1.7
BAAQMD Construction Emissions Threshold	54	54	82	54
Significant Impact?	No	**Yes**	No	No

NOTES:

[a] BAAQMD's construction-related significance thresholds for PM_{10} and $PM_{2.5}$ apply to exhaust emissions only and not to fugitive dust.

SOURCE: Appendix D

The BAAQMD Additional Construction Mitigation Measures (listed below) would be implemented as part of the Project to reduce Project construction ROG and NOx emissions. The BAAQMD Additional Control Mitigation Measure 12 requires that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. The California Air Resources Board considers use of engines meeting the Tier 4 Final standard in all construction equipment as effective in reducing NOx and PM emissions. However, as shown in Table 3.3-1, while the mitigated ROG emissions would be reduced to below the BAAQMD significance threshold with use of Tier 4 construction equipment for Project construction activities, mitigated NOx emissions would continue to exceed the significance threshold.

In addition to exhaust emissions, emissions of fugitive dust would also be generated by construction activities associated with grading and earth disturbance, travel on paved and unpaved roads, etc. Such emissions could result in a potential significant impact. With regard to fugitive dust emissions, the BAAQMD Guidelines focus on implementation of recommended dust control measures rather than a quantitative comparison of estimated emissions to a significance threshold. For all projects, the BAAQMD recommends the implementation of its *Basic Control Mitigation Measures* (BAAQMD, 2017c). These

measures would be implemented by the Project in accordance with adopted **Mitigation Measures AQ-1 BAAQMD Basic Control Mitigation Measures and AQ-2: , BAAQMD Additional Control Mitigation Measures**, and are listed below. The BAAQMD considers implementation of these dust control measures to result in a less than significant impact due to construction fugitive dust.

Mitigation Measure AQ-1: BAAQMD Basic Control Mitigation Measures

The contractor shall implement the following measures:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
- Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours.

Mitigation Measure AQ-2: BAAQMD Additional Control Mitigation Measures

The contractor shall implement the following measures:

- All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.

- Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize the idling time of diesel powered construction equipment to two minutes consistent with the requirements of Title 13, Section 2485, of the California Code of Regulations and Title 13, Section 2449, of the California Code of Regulations.
- A plan shall be prepared to the satisfaction of the Environmental Services Department's Project Manager demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low Volatile Organic Compound (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- Require that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM.
- Require that all contractors use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines.

According to the BAAQMD, no single project will, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. In addition, according to the BAAQMD *CEQA Air Quality Guidelines*, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2017c). Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts. As explained above, even with the use of Tier 4 engines in all construction equipment greater than 50 horsepower, which could occur through implementation of the BAAQMD Additional Control Mitigation Measure 12 above, the Project's mitigated impact during construction would be significant with

respect to NOx emissions, and therefore, per the BAAQMD guidance, it would result in a cumulatively considerable net increase of NOx. This impact would be the same as that analyzed in the Plant Master Plan EIR. No new or more significant impacts beyond those identified in the certified Plant Master Plan EIR would result. **Same as Approved Project. (Significant and Unavoidable)**

Significance after Mitigation: Significant and unavoidable for construction impacts.

Operation

Upon completion of construction activities, the Project would not need any additional staff at the Facility. Post-closure monitoring of the consolidated area would include periodic and/or annual observations for cap maintenance, and inspection following significant rain events and/or earthquakes. Maintenance activities would include mowing and trimming of the area one to four times per year, depending on precipitation and would be completed by four staff over a two-week period.[17] Emissions generated from these intermittent operational and maintenance activities would be minimal and well below the BAAQMD's operational significance thresholds. This would be a less than significant impact, similar to the operational impact identified in the certified Plant Master Plan EIR. The Project would not result in any new or more significant impacts beyond those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Toxic Air Contaminants

Construction

The Plant Master Plan EIR identified less than significant impacts related to the exposure of sensitive receptors to toxic air contaminants (TACs) primarily in the form of diesel particulate matter (DPM) from project-level Facility improvements combined with the economic development. Though a HRA was not conducted due to the speculative nature of the program-level Facility improvements (including the Project), the Plant Master Plan EIR concluded that, as program-level improvements would not occur at the same intensity as project-level improvements, the amount of construction emissions generated by these long-term improvements would be less than the emissions generated by project-level improvements evaluated and found to be less than significant. Therefore, the Plant Master Plan EIR identified a less-then-significant impact for exposure of sensitive receptors to DPM emissions from construction of program-level improvements.

Construction activities associated with the Project would result in the generation of exhaust emissions that contain air pollutants, including particulate matter (PM_{10} and $PM_{2.5}$), the majority of which would be DPM; a known TAC. Exposure of sensitive receptors to TAC

[17] Once cleanup is complete, the Project area could also be used for construction staging for other projects. These other projects would be required to implement dust control measures, including the BAAQMD's *Basic Control Mitigation Measures* for construction fugitive dust.

emissions could result in an elevated health risk. Under the California Environmental Protection Agency guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mix of chemicals that make up diesel exhaust as a whole.

The BAAQMD has identified a distance of 1,000 feet from the source to the closest sensitive receptor locations within which community health risk impacts are likely (BAAQMD, 2017c). Project construction sources would be separated from the nearest sensitive receptors by a distance of at least 4,500 feet, which would help reduce exposure. Furthermore, as shown in Table 3.3-1, PM_{10} emissions associated with construction of the Project would be 1.6 pound per day. At this emission level and with the large buffer distance separating the sources and receptors, short-term construction activities extending over a duration of 30 months would not lead to a new significant increase in health risk from exposure to TACs. Therefore, the impact of exposure of sensitive receptors to TACs would be less than significant, same as identified in the certified Plant Master Plan EIR. No new or more significant impacts beyond those identified in the Plant Master Plan EIR would result. **Same Impact as Approved Project. (Less than Significant)**

Operation

As described in Section 2.6 of the Project Description, post-closure monitoring of the consolidated area would include periodic and/or annual observations for cap maintenance, and inspection following significant rain events and/or earthquakes. Maintenance activities would include mowing and trimming between one and four times per year, depending on precipitation and would be completed by four staff over a two-week period. No additional staff would be required for these activities. Operation and maintenance is not expected to generate DPM emissions as there would be no TAC sources located or used at the Project site. **(Less than Significant)**

Criteria Air Pollutants

Construction and Operation

The Project would generate criteria pollutant emissions ROG, NOx, and particulate matter, as discussed under checklist question b). However, the health risk impacts of these emissions on sensitive receptors is difficult if not speculative to quantify. Given that ozone formation in the atmosphere occurs through a series of complex photo-chemical reactions between its precursors, ROG and NOx and are dependent on many factors including the presence of sunlight, dispersion from wind, and topography that affects wind patterns, the impacts of ozone are considered on a basin-wide or regional basis instead of a localized basis. The health-based ambient air quality standards for ozone therefore are as concentrations of ozone and not as tonnages of their precursor pollutants (i.e., NO_X and ROG). It is not necessarily the amount of precursor pollutants emitted that causes human health effects, but the concentration of resulting ozone or particulate matter. Because of the complexity of ozone formation and the non-linear relationship of ozone concentration with its precursor pollutants, and given the state of environmental science modeling in use at this time, it is infeasible to convert specific project level emissions of NO_X or ROG emitted in a particular area to concentration of ozone in that

area. Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone (SCAQMD, 2014; SJVAPCD, 2014). Therefore, a project's exceedance of the numeric indicators for ROG or NO_X emissions during either construction or operation does not necessarily result in an increase in ground-level ozone concentrations in proximity to the Project sites or elsewhere in the air basin, a less than significant impact. **(Less than Significant)**

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Construction and Operation

The Plant Master Plan EIR listed the Project (Improvement B1) as one of the proposed biosolids management improvements that would include odor control features and hence concluded odor impacts to be less than significant.

Odors from wastewater treatment facilities are typically associated with biological activity that produces gaseous inorganic compounds. The Project would involve the remediation of inactive lagoons that contain biosolids placed in them between 1962 and 1974. No additional materials have been placed in the lagoons since 1974.

Due to the age of the biosolids, no biological activity is expected and hence odor is not expected to be a concern. In 1998, the material in each lagoon was bulldozed and moved to the center which is where they remain currently without a cap. Based on odor complaint data from the BAAQMD for the last 5 years, there have been no confirmed complaints for the entire Facility from neighboring communities (BAAQMD, 2019). Therefore, currently, the biosolids even in their uncapped condition do not currently constitute a source of odor. The Project involves consolidation of the material from all the lagoons into one of the identified consolidation areas and capping of the consolidated material. During the consolidation activities, the City or its contractor would monitor work areas on an as-needed basis for methane and hydrogen sulfide concentrations[18], and apply odor masking agents if needed. Odors have the potential to be most prevalent when the biosolids are moved. Minimizing odors would be accomplished by applying a deodorant, masking agent, or neutralizing agent, and covering the biosolids at the end of the working day with soil or a geosynthetic material. Similar to existing biosolids operations in the active biosolids lagoons[19] a water truck would also be run during hauling to keep dust at a minimum, and odor neutralizing chemicals would be added to the water. The consolidation area is being designed with containment features (e.g., a cap) that would

[18] If methane and/or hydrogen sulfide emissions are detected or suspected, the contractor would monitor the work area using a meter capable of measuring methane and hydrogen sulfide concentrations.

[19] Under current operations, the stockpiling, hauling, and removal of biosolids occurs between July and October. Odor impacts are the greatest during this process when piles are turned and loaded into trucks to be hauled. A water truck is run 8-10 hours a day during hauling season to keep odors and dust at a minimum. Odor neutralizing chemicals are added to the water. In addition, a mobile water mister is used to reduce odors. (Carollo Engineers, San José/Santa Clara Water Pollution Control Plant Master Plan Project Memorandum No. 5, Odor Treatment Alternatives, Final Draft. September 2011.)

further significantly reduce odors. Therefore, the Project would not result in odor emissions adversely affecting receptors located more than 4,500 feet away. No new or more significant impacts beyond those identified in the Plant Master Plan EIR would result. **Same Impact as Approved Project. (Less than Significant)**

References

BAAQMD, 2017a. Spare the Air: Cool the Climate – Final 2017 Clean Air Plan, adopted April 19.

BAAQMD, 2017b. Air Quality Standards and Attainment Status, available at http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status, last updated January 5, 2017.

BAAQMD, 2017c. California Environmental Quality Act Air Quality Guidelines, May 2017, available at https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en

BAAQMD, 2019. Odor Complaint Data for the San Jose-Santa Clara Regional Wastewater Facility – BAAQMD Public Records Request Portal, May 9, 2019.

SCAQMD, 2014. Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.

SJVAPCD, Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party in Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.

3.2 Biological Resources

3.2.1 Setting

Environmental Setting

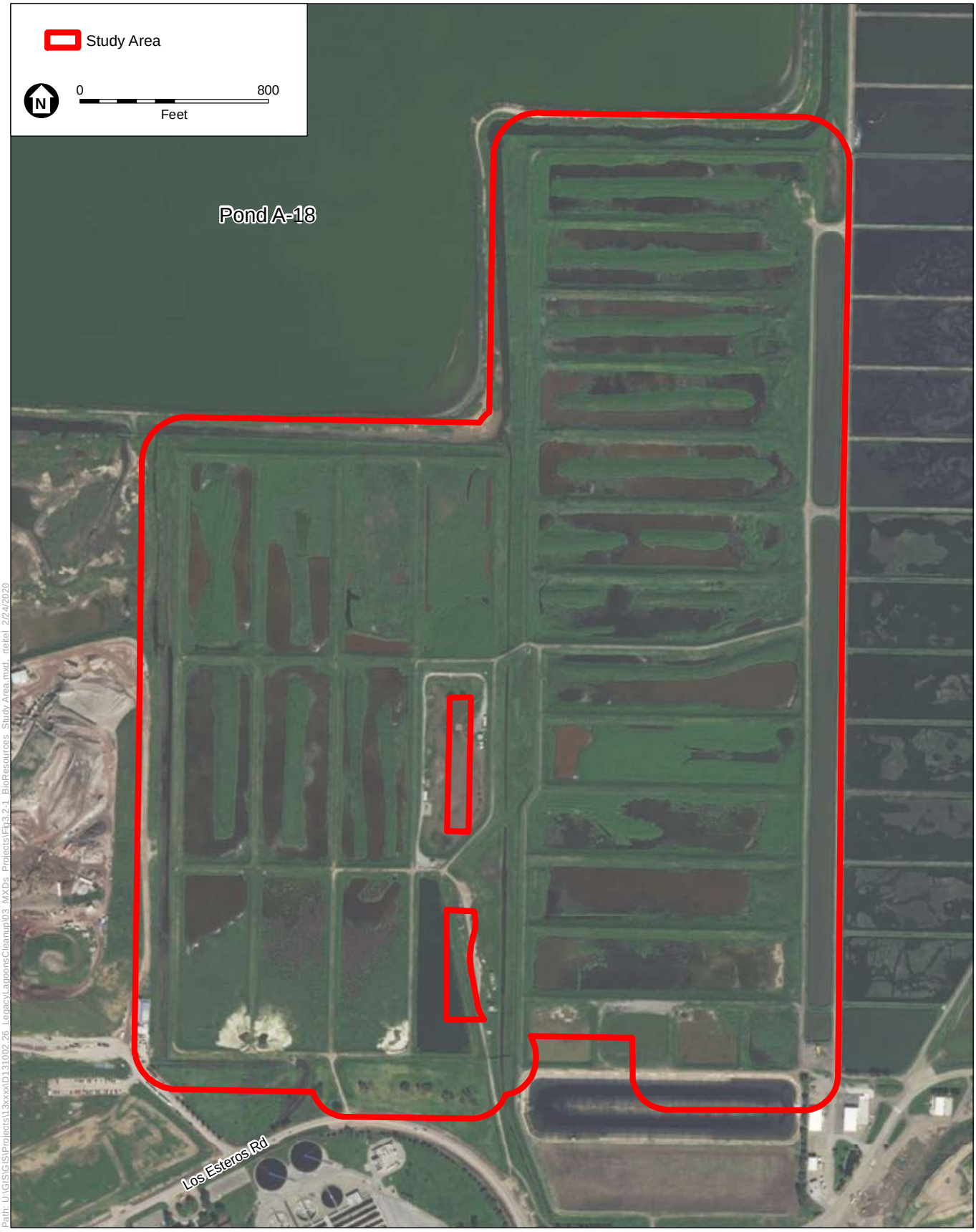
Biological resources located within the Project site and surrounding areas reflect a portion of the same resources described in the certified Plant Master Plan EIR.[20] The biological resources setting relevant to the Project site has not appreciably changed since the adoption of the Plant Master Plan EIR. This includes applicable regulations and the existing condition of sensitive biological resources, such as wetlands, natural communities, and habitats that support special-status plant and wildlife species. Vegetation communities within the Project site include alkali grassland, non-tidal salt marsh, open water, ruderal, unvegetated salt panne, and developed areas. These habitats are described in greater detail in the Biological Resources Existing Habitats Technical Memorandum in **Appendix E**.[21] In addition, wetlands and other waters, including seasonal wetlands and associated vegetation, are present in the Project site in the form of non-tidal salt marsh, open water, and unvegetated salt panne habitats. There is no hydrologically-dependent shrub and tree community, and hence no riparian habitat is present within the Project site; however, a pickleweed (*Salicornia pacifica*)-dominated non-tidal salt marsh habitat on site is a designated sensitive natural community. Figure 6 (Habitats in the Project Area) in *Appendix J* of the Plant Master Plan EIR shows the inactive biosolids lagoons uniformly mapped as "inactive biosolids lagoons and drying beds," and does not include specific vegetation communities found within the inactive biosolids lagoons.

ESA mapped the distribution of three vegetation types within the inactive biosolids lagoons: ruderal, non-tidal salt marsh, and unvegetated salt panne (see Appendix E for more details). Although the latter vegetation type was discussed in *Appendix J*, it was described only as being present around the border of Pond A18, but was not described within the current Project site. Setting discussions from the certified Plant Master Plan EIR for biological resources in the Project site are otherwise still accurate and applicable to the Project.

This analysis is based on results of the following data: (1) biological resource surveys and relevant biological literature, including the findings of the certified Plant Master Plan EIR surveys associated with the Project site, plus a 150-foot buffer (referred to as the "study area" and shown on **Figure 3.2-1**); (2) special-status species lists derived from the USFWS, CDFW, and CNPS; and (3) a field reconnaissance survey of the Project site conducted on December 9, 2019 to record current habitat conditions (refer to the Biological Resources Environmental Setting Technical Memorandum in Appendix E).

[20] City of San José, 2013. San José/Santa Clara Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

[21] Environmental Science Associates (ESA), 2019. San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup Project Biological Resources Environmental Setting Technical Memo (Draft). December, 2019.



SOURCE: NAIP, 2016; ESA, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 3.2-1
Biological Resources Study Area

ESA

Special-status species lists for this analysis were derived from:

- USFWS, Information for Planning and Consultation (IPaC) list of threatened and endangered species that may occur in the proposed Project location, and/or may be affected by Project activities.[22]
- CNDDB, Rarefind 5 computer program: Federal Endangered and Threatened Species that May Be Affected by Projects in the Milpitas, Mountain View, Newark, and Niles, California, U.S. Geological Survey 7.5-minute topographic quadrangles.[23]
- CNPS, Online Inventory of Rare and Endangered Plants for the Milpitas, Mountain View, Newark, and Niles, California, U.S. Geological Survey 7.5-minute topographic quadrangles.[24]

The lists of special-status species with the potential to occur in the study area are included in Appendix E. Biological resources within the study area were documented by Erika Walther, Wildlife Biologist with ESA, and Joe Sanders, Botanist with ESA, during a field reconnaissance survey conducted on December 9, 2019. The field reconnaissance consisted of a pedestrian survey of the inactive biosolids lagoon levees and berms, a representative sample of lagoon basins, and the staging area. The focus of the survey was to characterize the current habitat in the study area.

The Migratory Bird Treaty Act and California Fish and Game Code protect raptors, most native migratory birds, and resident breeding birds that may migrate through and/or nest in the study area. Please refer to the Biological Resources Environmental Setting Technical Memorandum (Appendix E) for further details pertaining to the raptors and migratory birds observed on the Project site during the reconnaissance survey.

Sensitive natural communities are designated by various resource agencies, such as California Department of Fish and Wildlife (CDFW), or in local policies and regulations, and are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution, and are considered threatened enough to warrant some level of protection. CDFW tracks communities of conservation concern through its *California Sensitive Natural Community List*. Natural Communities with ranks of S1 to S3 are considered Sensitive Natural Communities to be addressed in the environmental review processes of CEQA and its equivalents.[25] Sensitive plant communities in the study area are summarized in **Table 3.2-1**.

22 USFWS, 2019. List of threatened and endangered species that may occur in the proposed project location, and/or may be affected by San José RWF Outfall Bridge and Instrumentation Improvements Project. December 15, 2019.

23 California Department of Fish and Wildlife (CDFW), 2019. California Natural Diversity Database query for USGS 7.5-minute topographic quadrangle of Milpitas, Mountain View, Niles, Newark, accessed August 2019.

24 California Native Plant Society (CNPS), 2019. California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org Accessed August 20 2019.

25 CDFW, 2019. Natural Communities –Natural Communities List Arranged Alphabetically by Life Form, Sept 2010. Available at: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/List. Accessed August 2019.

TABLE 3.2-1
SENSITIVE NATURAL COMMUNITIES WITHIN THE STUDY AREA RELATIVE TO NATURAL COMMUNITIES IDENTIFIED IN THE HABITAT ASSESSMENT

Location	Vegetation Types Present	CDFW California Natural Community	Natural Community Alliance(s)[a]	State Rarity Ranking[b]
Within footprint of wetland mapped in basins of inactive biosolids lagoons; isolated patch northeast of Lagoon L-4	Pickleweed (*Sarcocornia pacifica*); alkali heath (*Frankenia salina*)	Pickleweed mats	*Sarcocornia pacifica (Salicornia depressa) Herbaceous Alliance*	S3

NOTES:
[a] Sawyer, J., T. Keeler-Wolf, J. M. Evens. 2009. A Manual of California Vegetation. Available: http://vegetation.cnps.org/.
[b] S1 = **Critically imperiled** in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state. S2 = **Imperiled** in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state. S3 = **Vulnerable** in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

Since certification of the Plant Master Plan EIR, an aquatic resources delineation was conducted by ESA on July 16, 2019, and December 9, 2019.[26] The delineation found that portions of the Eastern Drainage Channel within the Project site may be considered waters of the U.S. The delineation also concluded that the waters and wetlands within the lagoons and the Eastern Drainage Channel qualify as wetlands under the California state definition. Refer to Figure 3.2-2.

Regulatory Setting

The regulatory setting for biological resources in the Plant Master Plan area is described in Plant Master Plan EIR Section 4.7.2. Elements of the regulatory setting for biological resources identified in the Plant Master Plan EIR have not notably changed since 2013. Elements of the regulatory setting that have not changed since 2013 are incorporated by reference in the impact analysis in Section 3.2.2 of this document.

Federal and State

Short-term impacts to wetlands and other waters, including seasonal wetlands, streams and associated vegetation, require the appropriate permits from regulatory agencies. The Army Corps of Engineers (USACE) regulates discharges of fill to jurisdictional wetlands and other waters under Section 404 of the Clean Water Act. Wetlands and other waters that fall under the jurisdiction of the Corps also are regulated by the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act (CWA). The RWQCB also regulates a broader array of jurisdictional waters of the state under the Porter-Cologne Water Pollution Quality Control Act (Porter-Cologne). The CDFW regulates alteration of the bed or bank of

[26] ESA, 2019. San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup Project Biological Resources Aquatic Resources Delineation Report (Draft). December 2019.

streams or associated wildlife habitat under Section 1600 of the California Fish and Game Code. Impacts to jurisdictional wetlands and other waters are considered potentially significant under CEQA, requiring mitigation, and any impacts to the waters or streambeds typically require permits from regulatory agencies.

3.2.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of many capital projects at the Facility, including projects affecting the same areas that would be affected by the Project. The Plant Master Plan EIR identified the following impacts on biological resources:

- No impact on interference with the movement of any applicable native or migratory fish or wildlife species resulting from the Plant Master Plan.
- Potentially significant, but mitigable to less-than-significant, impacts on special-status plant and wildlife species, riparian communities, wetlands, a local protected tree ordinance, and an adopted habitat conservation plan.

Issues	*New Potentially Significant Impact*	*New Less Than Significant Impact with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
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 state or federally protected wetlands (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?	☐	☐	☐	☒	☐

Discussion

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?

The findings of the reconnaissance surveys, the literature review, and the special-status species database queries were used to determine which special-status species may occur in the study area. Determination of a low, moderate, or high potential for species occurrence at the Project site was based on special-status species occurrence records and current site conditions. Non-listed birds protected by the Migratory Bird Treaty Act (MBTA) were evaluated based on potential for nesting in the study area since the MBTA protects birds that are nesting, as opposed to foraging or dispersing through habitat. Only species with a moderate or high potential for occurrence are discussed further in this section and are shown in **Table 3.2-2**. Species unlikely to occur, or with a low potential to occur, in the study area due to lack of suitable habitat or range are not discussed further in this section.

TABLE 3.2-2
SPECIAL-STATUS SPECIES WITH A MODERATE OR HIGH POTENTIAL TO OCCUR WITHIN THE STUDY AREA

Common Name	Scientific Name	Species Status (Federal/State/Other)	Potential to Occur
Plants			
Congdon's tarplant	*Centromadia parryi ssp. congdonii*	-/-/1B.1	High
Birds			
Northern harrier	*Circus cyaneus*	-/SSC/-	Moderate
Salt marsh common yellow throat	*Geothlypis trichas sinuosa*	-/SSC/BCC	Moderate
Alameda song sparrow	*Melospiza melodia pusillula*	-/SSC/BCC	High
Mammals			
Salt marsh harvest mouse	*Reithrodontomys raviventris*	FE/SE;FP/-	Moderate

Federal Listings
FE = Listed as endangered under the FESAFT = Listed as threatened under the FESA
BCC = Bird of Conservation Concern (USFWS)
State Listings
SE = Listed as endangered under the CESA
SSC = Species of Special Concern (CDFW)
FP = Fully Protected (CDFW)

California Rare Plant Rank (CRPR)
Rank 1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B = Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A = Plants presumed extirpated in California, but more common elsewhere.
Rank 2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
An extension reflecting the level of threat to each species is appended to each rarity category as follows:
.1 – Seriously endangered in California.
.2 – Fairly endangered in California.
.3 – Not very endangered in California.
n/a = not applicable

SOURCE: Appendix E

Special Status Plants

Construction and Operation

The Plant Master Plan EIR identified significant impacts to Congden's tarplant, (*Centromadia parryi* ssp. *congdonii*), a California Rare Plant Rank (CRPR) 1B.2 plant. Impacts were associated with future development in Plant Master Plan areas that are currently annual grassland and seasonal wetland habitat. The Plant Master Plan EIR concluded that implementation of mitigation (i.e., **Mitigation Measure BIO-1:Reduce Impacts to Tarplant**) in the Plant Master Plan EIR) to reduce impacts to Congdon's tarplant would reduce impacts to less-than-significant levels. Congden's tarplant has been observed scattered throughout annual grassland in the vicinity of the San José-Santa Clara Regional Water Facility (Facility). While Congdon's tarplant was not observed during the Project's reconnaissance survey and wetland delineation, suitable habitat is present for this species in disturbed upland habitat and seasonal wetland in and around the lagoons. Grading of lagoon basins and windrows could result in permanent removal of Congdon's tarplant, if present; this would be a significant impact. Mowing and trimming of vegetation during operations and maintenance (O&M) of the former legacy biosolids lagoons could damage Congdon's tarplant, if present; this would be a significant impact. Implementation of Plant Master Plan EIR **Mitigation Measure BIO-1: Reduce Impacts to Tarplant** would mitigate for the permanent loss of Congdon's tarplant during construction and protect Condon's tarplant from O&M impacts in the former legacy biosolids lagoons following project construction, reducing impacts to a less-than-significant level, same as those identified in the Plant Master Plan EIR. No additional mitigation is required. The mitigation measure below is based on **Mitigation Measure BIO-1: Reduce Impacts to Tarplant** from the Plant Master Plan EIR and includes updates to reflect refinements to the mitigation measures accepted under recent project Addendums tiered from the Plant Master Plan EIR, as well as Project conditions particular to the Legacy Lagoons project.[27] In addition, a requirement for Worker Environmental Awareness Training has been added. The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure BIO-1: Reduce Impacts to Tarplant.

For purposes of reducing construction-related impacts to Congdon's tarplant, the City's Environmental Services Department (ESD) shall provide a qualified biologist to:

- Conduct surveys for Congdon's tarplant May 1st through October 31st (inclusive) prior to implementing construction-related vegetation removal and/or excavation and fill activities. Surveys shall be conducted by a qualified biologist. The survey will follow the CDFW *Protocols for Surveying and*

[27] The mitigation measure has been modified to: reflect that burrowing owl mitigation measures are not anticipated for this project; clarify which measures are applicable to construction activities versus operations and maintenance activities; and, include a seasonal survey window corresponding to the blooming period for Congdon's tarplant to ensure it can be identified during the survey.

Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.[28]

- Avoid damaging or removing individuals of Congdon's tarplant while conducting the above activities whenever possible.
- Prior to construction, all workers shall take part in a Worker Environmental Awareness Training program conducted by an agency-approved biologist. The biologist shall train work crews in standard procedures for identifying and avoiding impacts to all special-status species with the potential to occur in the work area. The awareness program shall be conducted at the start of construction and thereafter as required for new construction personnel. A sign-in sheet for crew receiving the training shall be maintained on file by ESD.

The permanent loss of Congdon's tarplants shall be mitigated at a minimum mitigation-to-impact ratio of 1:1. To address permanent loss of Congdon's tarplant individuals, the following measures shall be implemented:

- During July (inclusive), prior to initiation of construction activities, ESD shall provide a qualified biologist to begin tracking Congdon's tarplant within the project area to determine when plants have set seeds and identify individual from which to collect seeds. Once seeds have set, seeds from individuals of Congdon's tarplant from within the project area shall be collected during August or September (inclusive) under the direction of a qualified biologist, prior to initiation of activities that will impact individuals, and immediately sown at reseeding location(s) to mimic the species' natural seasonal cycle of dispersal and germination prior to the its blooming period, which can begin as early as May (inclusive).
- Seed of Congdon's tarplant shall be applied within a proposed replacement area, the location of which shall be determined in consultation with CDFW. Location of seed planting will be recorded using a submeter accuracy GPS unit (e.g., Trimble GPS) to enable finding the relocation plantings for monitoring.
- Areas seeded with Congdon's tarplant shall be monitored during the first 5 years following reseeding. Monitoring shall be conducted during the peak blooming period (July 1 through November 30, inclusive). The planted population shall be compared to a known reference population[29] each time monitoring is conducted to accurately verify the degree of success of the planted population.
- During the first year of monitoring, revegetation shall be considered successful if the species in 70% of the reseeded area are occurring at densities comparable to the reference population. If unsuccessful, seed shall be collected and sown in the unsuccessful areas prior to the rainy season that year. If reseeding is

[28] California Department of Fish and Wildlife (CDFW). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. Revised March 20, 2018.

[29] A reference population is a subset of a target population (e.g., Congdon's tarplant) that serves as a standard against which the population being monitored is evaluated; in this case, the reference population is checked to determine plant vigor, whether blooming is occurring, etc., so that the success of the monitored population can be compared to the established reference population.

necessary at any point during the monitoring period, the monitoring period shall reset (extended by five years) for the affected area.

- During each subsequent year of monitoring, revegetation will be considered successful if the species is found to be occurring in 80% of the reseeded area at densities comparable to the reference population.[30] If revegetation is unsuccessful for two consecutive years, seed will be collected and sown in the unsuccessful areas prior to the rainy season that year.
- During the final two years of monitoring, if seeding of previously unoccupied habitat is successful (plants occur in 80% of the reseeded area at densities comparable to the reference population), then the mitigation will be deemed successful and no additional monitoring will be required. If unsuccessful, the area will be deemed unsuitable habitat. In this case, revegetation of additional areas, determined in consultation with CDFW will occur, and an additional two years of monitoring will be conducted.

For purposes of reducing direct impacts to Congdon's tarplant during operations and maintenance (O&M):

- If Congdon's tarplant occurs within the footprint of the legacy biosolids lagoons project following the completion of the project and cannot be avoided during O&M activities, ESD shall conduct mowing and trimming of vegetation in areas occupied by Congdon's tarplant prior to flowering before November 15th to May 1st (inclusive) (to avoid the blooming season [May 1st to November 15th (inclusive)]) or after seeds have been set (November 16th).
- Mow no lower than 6 inches in areas with Congdon's tarplant in order to minimize removal of tarplant foliage prior to flowering.

Raptors and Nesting Migratory Birds

Construction and Operation

The Plant Master Plan EIR identified impacts to nesting resident and migratory birds that could utilize vegetation in or near the Project site. These impacts include temporary disturbance during construction and vegetation management in nesting habitat within the study area. Similar construction activities as those described in the Plant Master Plan EIR would occur under the Project, especially activities that involve ground disturbance and the use of heavy machinery for excavation/grading and stockpiling activities. Project construction activities, and mowing and trimming of vegetation during O&M of the former legacy biosolids lagoons, during the breeding season could render the study area temporarily unsuitable for foraging and nesting birds due to the noise, vibrations, and increased activity levels associated with vegetation grubbing, earth moving, and heavy equipment operation. Construction and O&M impacts during the breeding season would have potential to adversely affect MBTA and special-status nesting birds due to the potential to result in "take", or loss, of a nest. In addition, disturbances during the nesting

[30] Occurrence of the species in 70-80% of the revegetated area is a typical requirement for restoration planting success provided in regulatory permits from USFWS, RWQCB and CDFW.

season can cause reduced incubation, reduced foraging by adults, reduced feeding of chicks, nest predation, or nest abandonment, causing nest failure.

The Plant Master Plan EIR identified pre-construction survey requirements and CDFW protocols to protect nesting activity, if any were to occur at the time construction begins. Implementation of revised Plant Master Plan EIR **Mitigation Measure BIO-2d: Raptor and Migratory Bird Nest Measures** would reduce adverse effects to common and special-status nesting birds to less-than-significant by providing worker environmental awareness training, avoiding the bird nesting season, if feasible, and if avoidance of the bird nesting season is not feasible, requiring pre-construction surveys, and implementing no-disturbance buffers if active nests are located. These measures would reduce impacts to a less-than-significant level. No additional mitigation is required. The mitigation measure below is based on **Mitigation Measure BIO-2d: Raptor and Migratory Bird Nest Measures** from the Plant Master Plan EIR and includes updates to reflect refinements to the mitigation measures accepted under recent project Addendums tiered from the Plant Master Plan EIR. In addition, a requirement for Worker Environmental Awareness Training has been added. The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure BIO-2d: Raptor and Migratory Bird Nest Measures.

- If possible, construction, including mowing and trimming of vegetation, shall be scheduled between September 1st and January 31st (inclusive) to avoid the bird nesting season (February 1st – August 31st, inclusive).
- If Project construction is scheduled during the nesting season (February 1st– August 31st, inclusive), the City's Environmental Services Department (ESD) or its contractor shall retain a qualified wildlife biologist to conduct a survey for nesting raptors and migratory birds within 7 days of the start of construction or after any construction breaks of 14 days or more, within 7 days prior to the resumption of construction.
- Surveys shall be performed for the Project area and for suitable habitat within 300 feet. If an active nest is discovered, a no-disturbance buffer zone around the nest tree (or, for ground-nesting species, or nests identified on Facility buildings, the nest itself) shall be established.
- The no-disturbance zone shall be marked with flagging or fencing that is easily identified and avoided by the construction crew, and shall not affect the nesting birds. In general, the minimum buffer zone widths shall be as follows: 100 feet (radius) for non-raptor species and 300 feet (radius) for raptor species; however, the buffer zone widths may be adjusted if an obstruction, such as a building, is within line-of-sight between the nest and construction.
- Buffer zone widths and other avoidance measures may be modified based on consultation with CDFW and the USFWS. Buffer zones shall remain in place as long as the nest is active or young remain in the area and are dependent on the nest.

- Construction activities that are scheduled to begin outside the breeding season (September 1st through January 31st, inclusive) can proceed without surveys.
- If possible, all necessary tree and vegetation removal shall be conducted before the start of breeding bird season to minimize the opportunity for birds to nest at the Project site and conflict with Project construction activities.
- Prior to construction, all workers shall take part in an environmental awareness program conducted by an agency-approved biologist. The biologist shall train work crews in standard procedures for identifying and avoiding impacts to all special-status species with the potential to occur in the work area.
- The awareness program shall be conducted at the start of construction and thereafter as required for new construction personnel. A sign-in sheet for crew receiving the training shall be maintained on file by the ESD or its contractor.
- ESD shall notify the Director of Planning Building and Code Enforcement or Director's Designee when the mitigation actions will occur for approval prior to the start of construction.

Salt Marsh Harvest Mouse

Construction and Operation

Salt marsh harvest mouse preferred habitat is the middle and upper portions of dense, perennial salt marshes[31] and similar habitat in dikes wetlands adjacent to the Bay.[32] According to the Plant Master Plan EIR, salt marsh harvest mouse is known to use the salt marsh and salt panne habitats within the Water Pollution Control Plant site. Therefore, suitable habitat for salt marsh harvest mouse is present in the non-tidal salt marsh in the inactive biosolids lagoon basins.

Direct construction- and O&M-related impacts that could occur to salt marsh harvest mouse include mortality due to mowing, trimming and/or removal of vegetation using motorized equipment in suitable habitat for this species. In addition, mortality could occur to this species due to grading or fill activities or crushing by vehicles in suitable habitat for salt marsh harvest mouse. Indirect impacts could occur if equipment staging, Project construction or human activity render otherwise suitable habitat temporarily unsuitable due to the lack of accessibility or excessive noise, vibration, and increased activity levels associated with grubbing, earth moving, and heavy equipment operation. Any of these would be considered a significant impact.

Implementation of revised Plant Master Plan EIR **Mitigation Measure BIO-2c:Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures** would reduce potential impacts related to construction to salt marsh harvest mouse to a less-than–significant level through the following measures: providing environmental training to construction personnel to stop work and contact the qualified biologist if sensitive species is

31 Goals Project, 2000. *Baylands Ecosystem Species and Community Profiles: Life histories and environmental requirements of key plants, fish and wildlife*. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. P.R. Olofson, editor. San Francisco Bay Regional Water Quality Control Board, Oakland, Calif.

32 Shellhammer, H., R. Duke, and M. Orland. 2010. *Use of Brackish Marshes in the South San Francisco Bay by Salt Marsh Harvest Mice.* California Fish and Game 96(4): 256-259.

observed in the work area, conducting pre-construction surveys prior to initiation of ground disturbing work, stopping work if salt marsh harvest mouse is observed during vegetation clearing or construction, establishing a no-disturbance buffer if salt marsh harvest mouse is present, and creating salt marsh habitat for permanent impacts to this habitat.

Mitigation Measure BIO-2c: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures would reduce impacts to a less-than-significant level, same as those identified in the Plant Master Plan EIR. No additional mitigation is required. This mitigation measure includes an update to **Mitigation Measure BIO-2c: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures** from the Plant Master Plan EIR to reflect the particular Project conditions. .[33] In addition, the mitigation measure has been edited to include non-tidal vegetated salt panne habitat in the description of suitable habitat for salt marsh harvest mouse, and a requirement for Worker Environmental Awareness Training. The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure BIO-2c: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures

Avoidance and Minimization During Construction and Maintenance

Construction work, including site preparation; mowing, trimming and removal of vegetation; stockpiling; and earthwork, shall avoid suitable salt marsh harvest mouse habitat (defined under 1., below) to the extent possible during their breeding seasons (February 1 to November 30, inclusive). As work during the species' breeding seasons will likely be necessary, a species avoidance plan shall be developed in consultation with USFWS and CDFW, and then implemented. The species avoidance plan shall include, at minimum, the following:

1. Species avoidance measures shall be implemented for all construction work within 100 feet of suitable salt marsh and non-tidal vegetated salt marsh habitat capable of containing salt marsh harvest mouse (suitable habitat).
2. Prior to initiation of work within suitable habitat, a USFWS- and CDFW-approved biologist shall be retained to survey areas where disturbance is planned and supervise the hand removal of pickleweed, to avoid impacts on salt marsh harvest mouse. Monitoring will occur for the duration of all clearing work within suitable habitat.
3. If salt marsh harvest mouse or active nests of this species are observed during clearing activities, the following will occur:
    a. Clearing will cease and workers will move to a new area.

[33] Suitable habitat for salt marsh wandering shrew includes wet, medium high salt marshes in the six- to eight-foot elevation zone characterized by abundant driftwood and other debris scattered among one- to two-foot high pickleweed (Collins, P.W., 1998. *Salt marsh wandering shrew*, (Sorex vagrans halicoetes), in *Terrestrial Mammal Species of Special Concern in California (Draft),* Bolster, B.C., ed., California Department of Fish and Wildlife. Available online at: https:nrm.dfg.ca.gov.) This habitat is not present in the study area.

b. Project activities within 100 feet of the observation will be postponed and a minimum no-disturbance buffer of 100 feet will be established. The buffer will remain in place until the biologist determines that the individuals have left the area and are not present in or near (within 100 feet) of the work area.

If no individuals are observed during the surveys or avoidance protocol above, then buffers will not be required.

Prior to construction, all workers shall take part in an environmental awareness program conducted by an agency-approved biologist. The biologist shall train work crews in standard procedures for identifying and avoiding impacts to all special-status species with the potential to occur in the work area. The awareness program shall be conducted at the start of construction and thereafter as required for new construction personnel. A sign-in sheet for crew receiving the training shall be maintained on file by the project proponent.

For purposes of reducing direct impacts to salt marsh harvest mouse during operations and maintenance (O&M):

- O&M work, including mowing and trimming, shall avoid suitable salt marsh harvest mouse habitat to the extent possible during their breeding seasons (February 1 to November 30, inclusive).

Habitat Creation, Restoration

The project proponent or its contractor shall create and/or restore salt marsh habitat at a ratio of at least 1:1. A more specific ratio will be developed in consultation with USFWS or CDFW for project impacts. The project proponent will implement one or more of the following options (i) enhancement of salt marsh in the area south of Dixon Landing Road, (ii) enhancement of salt marsh habitat in some inactive biosolids lagoons, and/or (iii) payment to the South Bay Salt Pond Project to restore salt marsh habitat in the vicinity of the project, or as otherwise deemed appropriate through consultation with USFWS and CDFW. The created and/or restored salt marsh will exhibit hydrology similar to other salt marsh habitat in the surrounding area and retain similar functions and values as those salt marsh habitats that are lost.

With implementation of these measures, impacts on special-status wildlife and plants by the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

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?*

Construction and Operation

As discussed in the Setting section, no riparian habitat is present in the study area; however, sensitive natural plant communities in the study area are shown in Table 3.2-1. The footprint of the sensitive natural community in the study area, shown as "non-tidal salt marsh" in **Figure 3.2-2**, is completely within the wetland impact area described under c), below.

SOURCE: NAIP, 2016; ESA, 2019

Legacy Biosolids Lagoons Site Cleanup . D131002.26

Figure 3.2-2
Impacts to Sensitive Natural Communities and Wetlands and Waters of the U.S.

ESA

Therefore, direct impacts would be reduced to less-than-significant by implementing **Mitigation Measure BIO-2C: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures**. This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts to sensitive natural communities during construction compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Construction and Operation

The Plant Master Plan EIR identified impacts on wetland resources throughout the Plant Master Plan area. As described in the Setting section, wetland delineation surveys have been conducted for the current project site. These wetlands are expected to be permanently impacted by project-related construction, due to grading and fill activities in the inactive biosolids lagoons. Permanent impacts include 19.83 acres of non-tidal salt marsh, 40.63 acres of unvegetated salt panne, and 0.007 acres of open water; this would be a significant impact, as shown in Figure 3.2-2. No O&M impacts are anticipated.

Implementation of the updated versions of Plant Master Plan EIR **Mitigation Measures BIO-4a: Wetlands Avoidance Measures**[34] **and BIO-4b: Wetlands Restoration for Project-Level Improvements** [35] would require the Project to avoid impacts and obtain regulatory agency permits (refer to Section 3.2.1, Setting) and approvals to ensure the Project results in no net loss of wetland habitat functions and values. In addition, Plant Master Plan EIR **Mitigation Measure BIO-2c: Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew Measures** would require the Project proponent or its contractor to create salt marsh habitat at a ratio of at least 1:1 for impacts. Per this mitigation measure, the Project proponent may use enhancement of salt marsh habitat in some inactive biosolids lagoons, and/or payment to projects such as the South Bay Salt Pond Project to restore salt marsh habitat in the vicinity of the Project, or as otherwise deemed appropriate through consultation with USFWS and CDFW. The Project proponent will use some combination of on-site and off-site mitigation to compensate for permanently impacted wetlands. For example, the northern section of the Project site, where Lagoons L-16 through L-19 are located, would be transformed into tidal salt marsh in the long-term as part of the Shoreline Project, and could provide on-site mitigation for a portion of permanently impacted wetlands.

[34] Adopted Mitigation Measure BIO-4a has been updated to reflect project-specific construction activities, remove reference to subsequent environmental review, and provide additional project-specific measures to protect potentially jurisdictional features.

[35] Adopted Mitigation Measure BIO-4b has been updated to reflect the anticipated wetlands restoration process by which the City would compensate for Project impacts on wetlands.

Mitigation Measure BIO-4a: Wetlands Avoidance Measures.

Access roads, work areas, and infrastructure shall be sited by a qualified biologist to avoid and minimize direct and indirect impacts to jurisdictional wetland habitat features. Prior to the beginning of any construction-related activities, the following measures shall be applied to protect potential jurisdictional features, as directed by ESD in conjunction with a qualified biologist:

a. A protective barrier (such as silt fencing) shall be erected around water features adjacent to the Project at the "top of bank" or at the feature boundary to isolate them from Project activities and reduce the potential for incidental fill, erosion, or other disturbance;

b. Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities;

c. No equipment mobilization, grading, clearing, or storage of equipment or machinery, or similar activity shall occur at the Project site until a representative of the City has inspected and approved the protection fencing; and

d. The City shall ensure that the temporary fencing is continuously maintained until the Project is completed.

e. Drainage from all proposed facilities where chemical spills could occur during Project operation shall be directed away from sensitive resources and/or include other measures to minimize potential for release of potential pollutants to the environment.

Mitigation Measure BIO-4b: Regulatory Approval and Wetlands Restoration.

If it is determined during the design phase that impacts on wetland habitat cannot be avoided, the City's Environmental Services Department (ESD) shall obtain permits and approvals from USACE, RWQCB, and/or CDFW, as applicable. In order to ensure that the Project results in no net loss of wetland habitat functions and values, the City shall compensate for the loss of wetland resources through on-site restoration/creation, off-site protection and enhancement of wetland habitat, and/or purchase of mitigation credits consistent with the terms and conditions of permits and approvals from the resource agencies (USACE, RWQCB, and CDFW, as applicable). On-site or-off-site habitat restoration/creation and/or purchase of mitigation credits consistent with the terms and conditions of the resource agency permits shall be determined in consultation with the resource agencies, as applicable. The City shall prepare a mitigation plan, which shall include monitoring applicable requirements and success criteria.

With implementation of these measures, impacts on potential jurisdictional wetland habitat features by the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

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?*

Construction and Operation

The Plant Master Plan concluded that Legacy Lagoons Cleanup Project would not interfere with migratory corridors or impede the use of nursery sites because no wildlife corridors or nursery sites are present within or adjacent to the proposed Project site. The Project site is located within the Pacific Flyway along the southern shoreline of San Francisco Bay. Although specific migratory corridors in the vicinity of the Project site are unknown, it can be assumed that native avian species pass overhead during spring and fall migrations. During construction, which will occur on a short-term basis and over a small area relative to undeveloped wetlands and marsh in the vicinity of the Project site, birds will continue to fly over or around the Project site.

The City approved the Riparian Corridor Protection and Bird-Safe Design Policy (Policy 6-34) on August 23, 2016.[36] The policy provides guidance for how riparian projects[37] should be designed to protect and preserve the City's riparian corridors, and provides bird-safe design guidelines for buildings and structures constructed north of Highway 237. Since there is no riparian habitat identified in the study area and the Project will not result in new infrastructure or operations (i.e., no new sources of light or noise) that would impede the movement of migratory birds, the guidance in Policy 6-34 would not be applicable to the project.

The study area is not considered a terrestrial migratory pathway because it is currently surrounded by open water (Pond A18 and active biosolids lagoons), an active landfill, and the San José-Santa Clara Regional Wastewater Facility. As such, Project construction and O&M activities would not result in any new or more significant impacts beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant Impact)**

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Construction and Operation

The Plant Master Plan EIR concluded that the Plant Master Plan could result in loss of or damage to existing trees, and concluded that impacts would be Less Than Significant with Mitigation. The current Project would not remove any trees, and therefore no impact

[36] City of San José, 2016. *Riparian Corridor Protection and Bird-Safe Design* (Policy 6-34). Approved August 23, 2016. Available at https://www.sanjoseca.gov/home/showdocument?id=12815.

[37] "Riparian Projects" are defined in the policy as any development project located within 300 feet of a riparian corridor's top of bank or vegetative edge, whichever is greater, and that requires approval of a Development Permit as defined in Chapter 20.200 of Title 20 of the San José Municipal Code (the Zoning Code), except that projects that only required approval of a Single-Family House Permit under the provisions of the Zoning Code are not subject to this policy.

is anticipated. Therefore, the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (No Impact)**

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?*

Construction and Operation

The Plant Master Plan EIR concluded that Facility improvements in the inactive biosolids lagoons would not conflict with the Habitat Plan because all improvements would occur outside the Habitat Plan area. The current Project is outside of the Santa Clara Valley Habitat Conservation Plan /Natural Community Conservation Plan (HCP/NCCP) permit area. Therefore, the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant Impact)**

References

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3.3 Cultural Resources

3.3.1 Setting

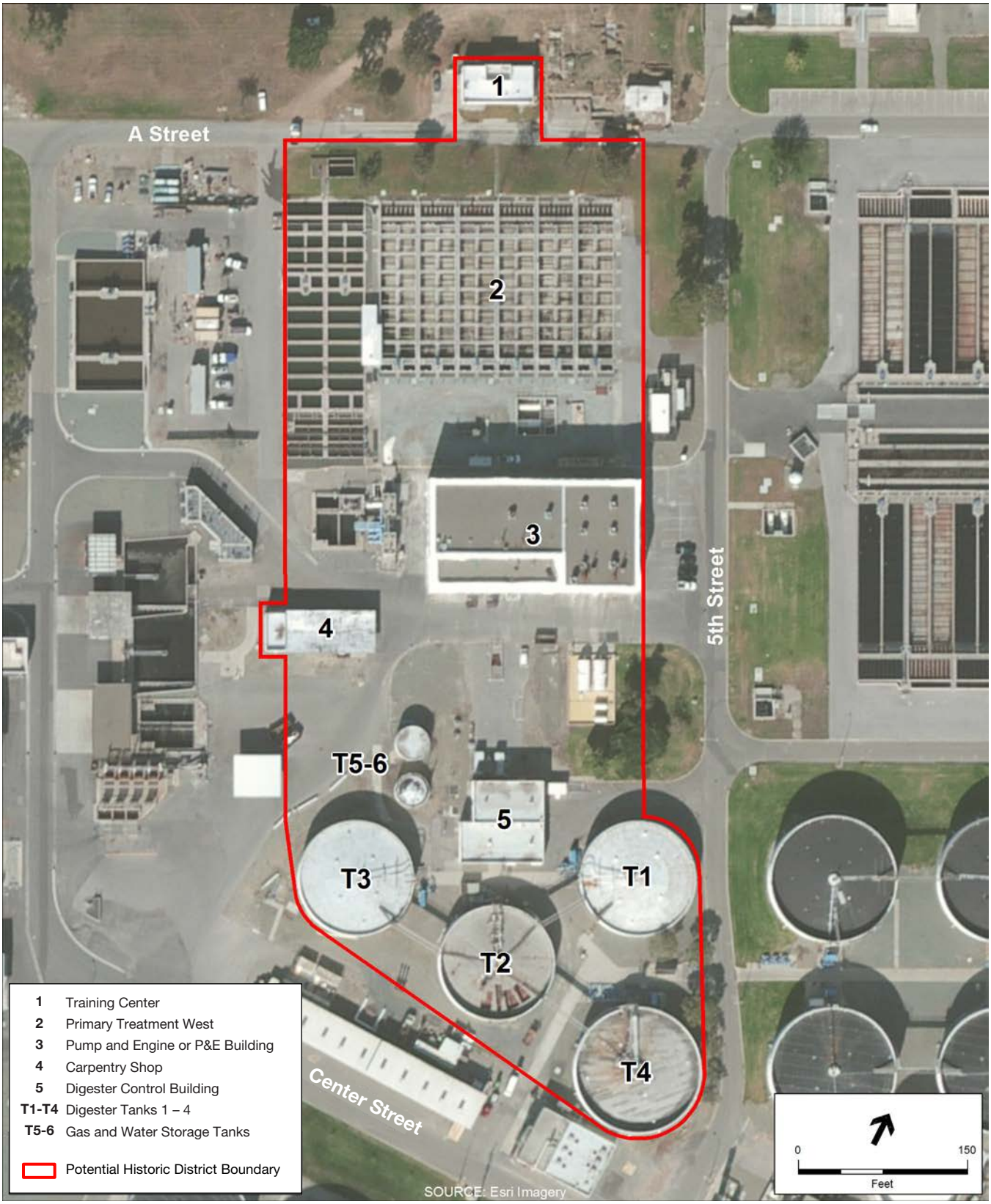
The cultural resources conditions relevant to the Project site have changed since the adoption of the Plant Master Plan EIR. Since the adoption of the Plant Master Plan EIR, several updates have been completed regarding the cultural resource conditions of the Facility. Archaeological studies, including two subsurface investigations, have been completed to further determine the archaeological sensitivity of the Facility. The City has also inventoried and evaluated structures in the older, northern portion of the Regional Wastewater Facility (Facility) for historical significance, further described below in the Environmental Setting.

Environmental Setting

The *San José-Santa Clara Regional Wastewater Facility Streamline Moderne Industrial Historic District* (District) has been recommended eligible for listing in the National Register of Historic Places (National Register) and the California Register of Historical Resources (California Register) under Criteria A/1 and C/3 at the local level. The District encompasses approximately seven acres on the north-central portion of the Facility and includes 11 contributing buildings and structures (**Figure 3.3-1**). Under Criterion A/1, the District appears eligible for its significant contributions to the completion of a 1946 engineering study and the resulting reduction of water pollution to the San Francisco Bay (Bay), including specific associations with Santa Clara County's important cannery business. Under Criterion C/3, the original buildings and structures at the RWF represent a significant and distinguishable entity comprised of 11 buildings and structures that are important examples of Streamline Moderne architecture in San José (Brennan et. al, 2016).

The period of significance for the District begins in 1956, when it was originally constructed, and ends in 1963, when the original buildings were modified. By 1958, it became apparent that the capacity of the original primary treatment plant was becoming overloaded due to rapid residential, commercial and industrial development. To address the Bay's continuing water quality issues and additional state and local regulations to enhance water quality of the Bay, a 1959 report recommended an expansion of the plant. The expansion was begun in 1961 and largely completed by 1968. By 1979, the plant was expanded yet again to include tertiary treatment to meet Clean Water Act regulations (Brennan et. al, 2016).

The proposed Project would consolidate biosolids in the lagoons located north of the District. Developed between 1962 and 1972, the lagoons are not located within the District boundaries. Buildings and structures at the Facility that were completed by 1968 to provide secondary treatment, and those completed by 1979 to provide tertiary treatment, have more general associations with stricter regulatory requirements for clean water, rather than specific associations with events that have made a significant contribution to the broad patterns of history (Criterion A/1). The numerous buildings and structures are also non-contributory to the District because they were completed in Modern industrial and minimally Brutalist-styles which depart stylistically from the Streamline Moderne buildings and structures completed in 1956. As such, the other buildings at the Facility outside of the District lack significance under Criterion C/1 (Brennan et. al, 2016).



SOURCE: ESA, 2016

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 3.3-1
San José-Santa Clara Regional Wastewater Facility
Potential Streamline Moderne Industrial Historic District

Since completion of the Plant Master Plan EIR two archaeological subsurface surveys have been completed on the south side of the Facility in the boundary lands adjacent to the Advanced Water Purification buildings. The subsurface surveys consisted of excavating shovel test pits (STPs) and auger samples. The purpose of the subsurface survey was to determine whether buried or otherwise obscured archaeological resources exist in the Facility. The subsurface survey did not identify any cultural materials in the vicinity of the Project (ESA, 2015a; ESA, 2015b). An updated records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System was conducted on October 18, 2019 (File No. 19-0671) and no cultural resources have been previously recorded in the Project site or within the immediate vicinity.

The Project site vicinity has been greatly altered over past 100 years through the construction of engineered channels and levees. The underlying geology in the Project site consists of artificially-placed fill and biosolids over San Francisco Bay Mud, which has low to very low potential for containing buried archaeological sites. Given the environmental context of the Project site, the distance from the historic terrestrial land surface, as well as the extensive previous disturbance, the archaeological sensitivity of the Project site for prehistoric archaeological resources is low.

Regulatory Setting

The regulatory setting for cultural resources in the Plant Master Plan area is described in Plant Master Plan EIR Section 4.14.2. Elements of the regulatory setting for cultural resources identified in the Plant Master Plan EIR have not notably changed since 2013 and are incorporated by reference in the impact analysis in Section 3.3.2 of this document.

3.3.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of the Plant Master Plan, including projects affecting areas adjacent to the Project. The Plant Master Plan EIR identified the following impacts on cultural resources:

- The certified Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant, impacts to a historical resource from program level improvements, and no impacts from project level improvements or other proposed land uses. The Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant, impacts to unknown archaeological resources and disturbance to human remains.

Issues	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
V. CULTURAL RESOURCES — Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒	☐

Discussion

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Construction and Operation

CEQA Guidelines Section 15064.5 requires the lead agency to consider the effects of a project on historical resources. A historical resource is defined as a building, structure, site, object, or district (including landscapes) listed in or determined to be eligible for listing in the California Register, or determined by a lead agency to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The following discussion will focus on architectural and structural resources. Archaeological resources, including archaeological resources that are potentially historical resources according to Section 15064.5, are addressed below under (b).

Under the proposed Project, legacy biosolids would be remediated by consolidating the biosolids into a set of inactive lagoons. As discussed above, the period of significance for the District ends in 1963 and the lagoons were developed between 1962 and 1972. Although the first of the lagoons were constructed during the District's period of significance, they were developed so late as to not have strong association with the significance themes (Criterion A/1). The lagoons are not Streamline Moderne buildings or structures and were not part of the original treatment plant design and therefore do not have specific associations with the reduction of water pollution to the San Francisco Bay, or with Santa Clara County's important cannery business (Criterion C/3). Therefore, the lagoons are not considered contributors to the District and are not a resource under CEQA.

Although the *San José-Santa Clara Regional Wastewater Facility Streamline Moderne Industrial Historic District* has been recorded and evaluated as eligible for listing in the California and National registers, implementation of the Project would not result in any significant impacts to the Historic District because none of the contributing buildings and structures would be demolished or otherwise altered by the Project, as the Project is located outside the proposed Historic District boundary. There would be no additional impacts to historical resources beyond those identified in the previously approved Plant Master Plan EIR. **Less Impact than Previously Approved Project. (Less than Significant Impact)**

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Construction and Operation

This section discusses archaeological resources, both as historical resources according to Section 15064.5 as well as unique archaeological resources as defined in Section 21083.2(g).

Based on the analysis provided above, the Project has a low potential to uncover archaeological resources. While unlikely, the inadvertent discovery of redeposited

archaeological resources cannot be entirely discounted, including in areas of artificial fill. Impacts to archaeological resources would be potentially significant. In the event that archaeological resources are encountered during ground disturbing activities, the following mitigation measure would reduce impacts to a less-than-significant level. This mitigation measure includes an update to **Mitigation Measure CUL-3a: Inadvertent Discovery of Archaeological Resources**. from the Plant Master Plan EIR to include a "preservation in place" clause, per a court case ruling (Madera Oversight Coalition Inc., et al., vs. County of Madera, September 2011). The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

Mitigation Measure CUL-3a: Inadvertent Discovery of Archaeological Resources.

If prehistoric or historic-era archaeological resources are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the City's Environmental Services Department (ESD) personnel and the Director of Planning, Building and Code Enforcement (PBCE) or Director's Designee. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); battered stone tools, such as hammer stones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

City's ESD or its contractor shall retain a Secretary of the Interior-qualified archaeologist to inspect the findings within 24 hours of discovery. If it is determined that the project could damage a historical resource as defined by CEQA (CEQA Guidelines §15064.5), construction shall cease in an area determined by the archaeologist until a mitigation plan has been prepared, approved by the Director of PBCE or Director's Designee, and implemented to the satisfaction of the archaeologist (and Native American representative if the resource is prehistoric, who will be identified by the Native American Heritage Commission [NAHC]). If the Native American Representative identifies the find as a tribal resource, ESD or its contractor shall proceed to Mitigation Measure CUL-3c. For archaeological resources, the archaeologist, in consultation with the Director of PBCE or Director's Designee and the City's Historic Preservation Officer, shall determine when construction can resume.

The preferred mitigation shall be preservation in place. If preservation in place is not physically or financially feasible, mitigation shall be data recovery through excavation. If preservation in place is selected as mitigation, the mitigation shall be accomplished through one of the four following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding the resource site into a permanent conservation easement. If preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to the satisfaction of the Director

of PBCE or Director's Designee to recover the scientifically consequential information from the resource prior to any excavation at the resource site. Treatment for most resources that could be encountered shall consist of (but shall not necessarily be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to the Director of PBCE or Director's Designee, the City's Historic Preservation Officer, the Northwest Information Center (if applicable), local and state repositories, libraries, and interested professionals.

With implementation of this mitigation measure, the project would not result in any new or more significant impacts to previously unknown archaeological resources than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

c) *Disturb any human remains, including those interred outside of formal cemeteries?*

Construction and Operation

There is no indication that the Project site has been used for burial purposes in the recent or distant past. While unlikely, the inadvertent discovery of redeposited human remains cannot be entirely discounted, including in areas of artificial fill. Impacts to human remains would be potentially significant. In the event that human remains are encountered during ground disturbing activities, implementation of **Mitigation Measure CUL-5: Inadvertent Discovery of Human Remains** from the Plant Master Plan EIR, as included below, would reduce this impact to a less-than-significant level.

Mitigation Measure CUL-5: Inadvertent Discovery of Human Remains.

If human remains are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt and the contractor shall notify the Director of PBCE or Director's Designee. ESD shall contact the Santa Clara County Coroner to determine whether or not the remains are Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall contact the NAHC within 24 hours. The NAHC would then identify the person or persons it believes to be the most likely descendant from the deceased Native American, who in turn would make recommendations to the City for the appropriate means of treating the human remains and any associated funerary objects which shall be implemented in accordance with Section 15064.5(e) of the CEQA Guidelines.

With implementation of this mitigation measure, the project would not result in any new or more significant impacts to previously unknown human remains than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

References

Brennan, Eryn, Brad Brewster, and Heidi Koenig, 2016. *San José-Santa Clara Regional Wastewater Facility Capital Improvement Program Cultural Resources Survey Report*. Prepared for the City of San José, December 2016.

ESA, 2015a. *San José-Santa Clara Regional Wastewater Facility Zanker Road Development Project Cultural Resources Survey Report*, Prepared for the City of San José, June 2015.

ESA, 2015b. *Cultural Resources Survey Report, San José-Santa Clara Regional Wastewater Facility Construction Enabling Project*, Prepared for the City of San José, July 2015.

3.4 Tribal Cultural Resources

3.4.1 Setting

Since the adoption of the Plant Master Plan EIR Assembly Bill 52 (AB 52) was passed, which applies to projects for which a lead agency has issued a Notice of Preparation (NOP) of an environmental impact report or notice of intent to adopt a negative declaration on or after July 1, 2015. Tribal cultural resources were not analyzed in the Plant Master Plan EIR.

Environmental Setting

Tribal cultural resources are: 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing in the California Register, or local register of historical resources, as defined in PRC Section 5020.1(k); or, 2) a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c).

On July 26, 2017, the City sent letters by certified mail to Native American tribes on the list of contacts for Santa Clara County provided by the Native American Heritage Commission. The letter included reference to the entire Facility and requested responses for concerns of projects within the Facility. No responses were received from that outreach effort.

ESA completed a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System on October 18, 2019 (File No. 19-0671). No cultural resources, including potential tribal cultural resources, have been previously recorded in the vicinity of the Project site. The Project site vicinity has been greatly altered over past 100 years through the construction of engineered channels and levees. The underlying geology in the Project site consists of artificially-placed fill and biosolids over San Francisco Bay Mud, which has low to very low potential for containing buried archaeological sites, including those considered to be tribal cultural resources.

Regulatory Setting

State

In September 2014, the California Legislature passed AB 52, which added provisions to the PRC to evaluate under CEQA impacts to tribal cultural resources, as well as consultation requirements with California Native American tribes (PRC Section 21080.3.1, 21080.3.2, 21082.3). Lead agencies are required to analyze project impacts to tribal cultural resources separately from archaeological resources (PRC Section 21074; 21083.09). A tribal cultural resource is defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

In regards to impacts to tribal cultural resources, PRC Section 21084.3 states:

a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.

b) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:

   1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

   2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

      (A) Protecting the cultural character and integrity of the resource.

      (B) Protecting the traditional use of the resource.

      (C) Protecting the confidentiality of the resource.

   3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

   4) Protecting the resource.

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
17. Tribal Cultural Resources — Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion

a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k),*

Construction and Operation

No known tribal cultural resources listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC Section 5020.1(k), pursuant to PRC Section 21074(a)(1), would be impacted by the Project.

However, if any previously unrecorded archaeological resource were identified during ground-disturbing construction activities and were found to qualify as a tribal cultural resource pursuant to PRC Section 21074(a)(1) (determined to be eligible for listing in the California Register or in a local register of historical resources), any impacts to the resource resulting from the Project could be potentially significant. Any such potential significant impacts would be reduced to a less than significant level by implementing **Mitigation Measure CUL-3a: Inadvertent Discovery of Archaeological Resources** and **Mitigation Measure CUL-5: Inadvertent Discovery of Human Remains** (refer to Section 3.3).

With implementation of these mitigation measures, the Project would not result in any new impacts to tribal cultural resources. (**Less than Significant with Mitigation**)

b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Construction and Operation

The City did not determine any resource that could potentially be affected by the Project to be a tribal cultural resource significant pursuant to criteria set forth in PRC Section 5024.1(c). Therefore, the Project is not anticipated to impact any such resources.

However, if any previously unrecorded archaeological resource were identified during Project implementation, particularly ground-disturbing construction activities, and were found to qualify as a tribal cultural resource pursuant to PRC Section 21074(a)(2) (determined by the lead agency to be significant pursuant to criteria set forth in PRC Section 5024.1[c]), any impacts to the resource resulting from the Project could be potentially significant. Any such potential significant impacts would be reduced to a less than significant level by implementing **Mitigation Measure CUL-3a: Inadvertent Discovery of Archaeological Resources** and **Mitigation Measure CUL-5: Inadvertent Discovery of Human Remains** (refer to Section 3.3).

With implementation of these mitigation measures, the Project would not result in any new impacts to tribal cultural resources. (**Less than Significant with Mitigation**)

References

Northwest Information Center (NWIC), File No. 19-0671. California Historical Resources Information System at Sonoma State University, Rohnert Park. On file at ESA, October 18, 2019.

3.5 Energy

3.5.1 Setting

This section describes energy use related to the construction and operation of the proposed Legacy Lagoons Project (Project) at the San José-Santa Clara Regional Wastewater Facility (Facility) in the City of San José and evaluates the potential for the Project's construction and operational activities to result in the wasteful and/or unnecessary consumption of energy.

The energy setting as relevant to the Project, including applicable regulations, has not appreciably changed since the certification of the Plant Master Plan EIR.

Environmental Setting

Electricity is provided to the Facility by the Pacific Gas and Electric Company (PG&E). PG&E provides service to approximately 13 million people throughout a 70,000 square mile service area in Northern and Central California. PG&E produces and purchases energy from a mix of conventional and renewable generating sources, which travel through its electric transmission and distribution systems to reach customers.

The Facility's cogeneration system produces electricity for electric equipment as well as heat that is recovered and used for the digesters. The system includes engine-generator sets and one Fuel Cell that can supply 1,400 kW. Combined, the engine-generators are capable of producing approximately 12 MW of electricity. Normally, the engine-generator sets meet the full electricity demand at the Facility. This is typically accomplished by using one or two 800 kW engine-generator sets, one 1,750 kW set, and two 2,800 kW sets, resulting in a total output of approximately 8,000 kW (one or two units are typically on standby). The imported electricity is provided by PG&E via two 115 kilovolt (kV) overhead power lines, which bisect Pond A18 in a north-to-south manner and connect to two 115 kV substations within the Facility (City of San José, 2013).

Regulatory Setting

Energy conservation is embodied in many federal, state and local statutes and policies.

Federal and State

At the federal level, energy standards apply to numerous products (e.g., the EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Administrative Code sets energy standards for buildings, rebates/tax credits are provided for installation of renewable energy systems, and the Flex Your Power program promotes conservation in multiple areas. Title 24 standards were most recently updated in 2019.

Local

At the local level, the City of San José as part of its Envision San José 2040 General Plan, has goals (Goal MS-14) and policies in place to reduce per capita energy consumption and increase

efficiency by at least 50 percent compared to 2008 levels by 2022 and maintain or reduce net aggregate energy consumption levels equivalent to the 2022 (Green Vision) level through 2040.

3.5.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR identified less-than-significant impacts related to implementation of the Master Plan for the potential to result in the wasteful and/or unnecessary consumption of energy.

Issues	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
VI. ENERGY — Would the project:					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒	☐

Discussion

a, b) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Both construction and operation of the Project would involve expenditure of energy.

Construction

The Plant Master Plan EIR concluded that energy consumption associated with construction of Facility Improvements would not have significant impacts related to energy because it would not: result in long-term depletion of non-renewable energy resources; permanently increase reliance on energy resources that are not renewable; reduce or interrupt existing electrical or natural gas services due to insufficient supply; or include inherently wasteful or unnecessary use of energy.

Similar construction activities as those described in the Plant Master Plan EIR would occur under the Project, including activities that involve the use of heavy machinery for pipeline installation, building construction, excavation/grading and stockpiling activities. Construction energy use would include both direct and indirect uses of energy. Direct energy use would include the consumption of fuel (typically gasoline and diesel fuel) for operation of construction equipment and vehicles. Energy in the form of electricity may also be consumed by some pieces of construction equipment, such as welding machines, power tools, and lighting; however, the amount of consumed electricity would be relatively minimal. Indirect energy use includes the energy required to make the materials and components used in construction. This includes energy used for extraction of raw

materials, manufacturing, and transportation associated with manufacturing. Direct energy represents about one-quarter of total construction-related consumption while indirect energy use typically represents the remaining three-quarters (Hannon, 1978).

It is not possible to calculate the precise amount of construction-related energy demand at this stage as it depends on operating conditions of the equipment that cannot be predetermined. Therefore, the CEQA checklist focusses on the efficient use of energy as opposed to a quantification of the actual amount of energy consumed. However, an estimate has been provided in the analysis below based on the Project construction schedule, equipment and usage data available at this point.

Construction activities associated with the Project is expected to last 30 months. Construction activities would include use of heavy-duty construction equipment including excavators, dozers, graders, backhoes, rollers and cranes. Construction equipment typically consume diesel fuel. Additionally, offsite vehicles would be required to transport equipment, materials, and workers to the Project site during construction. Construction activities are expected to generate an average of 40 worker commute trips per day from 20 workers. Truck trips would also be generated from the transport of construction materials particularly during installation of the cap, drainage, and aggregate base. It is assumed that trucks would be diesel-fueled, while the majority of worker trips are anticipated to utilize gasoline.

Based on construction equipment and vehicle trip data available, it is estimated that construction of the Project would use approximately 1.67 million gallons of diesel fuel and 13,940 gallons of gasoline fuel. For a Project of this scope and size, consumption of fuel energy resulting from short-term construction activities would be temporary, localized, and would not represent a significant amount of fuel in comparison to the 685 million gallons of gasoline and 36 million gallons of diesel that were sold in Santa Clara County in 2017 (CEC, 2018). Vehicles used for Project construction and operation would be required to comply with all federal and state efficiency standards.

There are no Project characteristics or features that would be inefficient or that would result in the use of equipment and vehicles in a manner that would be less energy efficient than similar projects. The fuel use for the Project would be consistent with typical construction and manufacturing practices, and energy standards such as the Energy Policy Acts of 1975 and 2005, that reduce consumption of fossil fuels, increase use of renewable resources, and enhance energy efficiency. The Project would comply with state and local requirements designed to minimize idling and associated emissions, which also minimizes use of fuel. Specifically, pursuant to **Mitigation Measure AQ-2: BAAQMD Additional Control Mitigation Measures** in Section 3.1, Air Quality, idling of commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower would be limited to a maximum of 2 minutes in accordance with the Title 13, Section 2485, of the California Code of Regulations and Title 13, Section 2449, of the California Code of Regulations. Therefore, Project construction would not require excessive or wasteful use of energy and would therefore not conflict with the applicable energy

policies. Further, though the Project would result in a temporary increase in energy use over the construction period, due to the scale of the Project and short term nature of construction energy use, the Project would not result in long-term depletion of non-renewable energy resources and would not permanently increase reliance on energy resources that are not renewable. Construction activities would not reduce or interrupt existing electrical or natural gas services due to insufficient supply, and would not include inherently wasteful or unnecessary use of energy. Because Project construction would not interrupt existing local PG&E service and because Project-specific construction-related energy demand would not be expected to have a material effect on energy resources, or result in wasteful or unnecessary use of energy, construction activities would result in a less-than-significant impact associated with energy consumption.

Operation

Upon completion of construction activities, operational energy use would be minimal and limited to vehicle trips related to inspection and maintenance activities associated with periodic observations for cap maintenance and inspection following significant rain events and/or earthquakes. Cap inspection would be conducted on an annual basis and would therefore generate trips once a year. In addition, maintenance activities would involve mowing and trimming of the area one to four times per year, depending on precipitation and would be completed by four staff over a two-week period.

Vehicle trips and any equipment use associated with maintenance and inspection are necessary to ensure the integrity of the engineered cap installed over the consolidated biosolids and fix any deficiencies as needed. As detailed in the Project description, the Project is necessary to comply with the San Francisco Bay Regional Water Quality Control Board's Order mandating the Facility to remediate and close the inactive biosolids lagoons. Hence, this minimal operational energy use would not be considered wasteful.

The Project would adhere to all applicable industry standards, plans, and policies that promote energy conservation during construction and operation. Therefore, the Project's energy use during construction and operation would constitute a less than significant impact, same as identified in the adopted Plant Master Plan EIR, and no new or more significant impacts beyond those identified in the Plant Master Plan EIR would result. **Same Impact as Approved Project. (Less than Significant)**

References

California Energy Commission (CEC), 2018. California Annual Retail Fuel Outlet Report Results (CEC-A15) Energy Assessments Division, September 27, 2018.

City of San José, 2013. San José-Santa Clara Water Pollution Control Plant Master Plan, Environmental Impact Report, November, 2013.

Hannon et al., 1978, Energy and Labor in the Construction Sector. Article in Science Magazine. November 24, 1978.

3.6 Greenhouse Gas Emissions

3.6.1 Setting

The environmental and regulatory settings relevant to greenhouse gases (GHGs) have not appreciably changed since the certification of the Plant Master Plan EIR.

Environmental Setting

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), chlorofluorocarbons (CFCs), and perfluorocarbons (PFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect.

Regulatory Setting

With regard to impacts from GHGs, both the BAAQMD and California Air Pollution Control Officers Association (CAPCOA) consider GHG impacts to be exclusively cumulative impacts; therefore, assessment of significance relative to the approved Plant Master Plan EIR is based on a determination of whether the GHG emissions from a project represents a cumulatively considerable contribution to the global atmosphere.

State

Executive Order S-3-05

In June 2006, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which established the following statewide emission-reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

This executive order does not contain any requirements that directly pertain to the Project; however, future actions taken by the State of California to implement these goals may affect the Project, depending on the specific implementation measures that are developed.

Executive Order B-55-18

In September 2018, Governor Brown signed Executive Order B 55 18, committing California to total, economy-wide carbon neutrality[38] by 2045. Executive Order B 55 18 directs the California Air Resources Board (CARB) to work with relevant state agencies to develop a framework to implement and accounting to track progress toward this goal. The goal will be incorporated into future Scoping Plans, as policies and actions which affect major sectors of California's economy, including transportation, agriculture, development, industrial, and others. This executive order does not contain any requirements that directly pertain to the Project because operational energy use would be minimal and limited to vehicle trips one to four times a year for inspection of the cap and mowing and trimming.

Assembly Bill 32

California Assembly Bill (AB) 32, *the Global Warming Solutions Act of 2006*, required the California Air Resources Board (CARB) to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt regulations that identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program. Under AB 32, CARB also was required to adopt a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. CARB established this limit in December 2007 at 427 million metric tons of CO_2e. This is approximately 30 percent below forecasted "business-as-usual" emissions of 596 million metric tons of CO_2e in 2020, and about 10 percent below average annual GHG emissions during the period of 2002 through 2004 (CARB, 2009). In the interest of achieving the maximum technologically feasible and cost-effective GHG emission reductions, AB 32 permits the use of market-based compliance mechanisms and requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

Climate Change Scoping Plan (AB 32 Scoping Plan)

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial Scoping Plan in 2008, outlining the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives (CARB, 2009). The First Update to the Scoping Plan was approved by CARB in May 2014 and built upon the initial Scoping Plan with new strategies and recommendations (CARB, 2014).

Executive Order B-30-15 and SB 32

In April 2015, Governor Brown issued an Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Reaching this emission reduction target

[38] Having a net zero carbon footprint, refers to achieving net zero carbon dioxide emissions by balancing carbon emissions with carbon removal (often through carbon offsetting) or simply eliminating carbon emissions altogether (the transition to the "post-carbon economy").

will make it possible for California to reach its ultimate goal of reducing emissions 80 percent under 1990 levels by 2050, as identified in Executive Order S-3-05.

Executive Order B-30-15 required CARB to update the AB 32 Climate Change Scoping Plan to incorporate the 2030 target. Subsequently, SB 32, which codifies the Executive Order's 2030 emissions reduction target, was approved by the Governor on September 8, 2016. SB 32 requires CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 statewide GHG emissions limit no later than December 31, 2030, the target established by Executive Order B-30-15.

CARB adopted the 2017 Scoping Plan for achieving this goal, which takes into account the key programs associated with implementation of the AB 32 Scoping Plan—such as GHG reduction programs for cars, trucks, fuels, industry, and electrical generation—and builds upon, in particular, existing programs related to the Cap-and-Trade Regulation; the Low Carbon Fuel Standard; much cleaner cars, trucks, and freight movement; power generation for the State using cleaner renewable energy; and strategies to reduce methane emissions from agricultural and other wastes by using it to meet the State's energy needs. The 2017 Scoping Plan also addresses, for the first time, GHG emissions from natural and working lands, including the agriculture and forestry sectors (CARB, 2017). The cornerstone of the 2017 Scoping Plan Update is an expansion of the cap-and-trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2030 limit set forth by Executive Order B-30-15. CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from large industrial facilities that emit more than 25,000 $MTCO_2e$ per year such as electricity generation, petroleum refining, cement production, and would therefore not apply to the project.

Local

BAAQMD Clean Air Plan

BAAQMD and other air districts prepare clean air plans in accordance with the federal and state Clean Air Acts. On April 19, 2017, the BAAQMD Board of Directors adopted the 2017 *Clean Air Plan: Spare the Air, Cool the Climate*, an update to the 2010 Clean Air Plan (BAAQMD, 2017). The Clean Air Plan is a comprehensive plan that focuses on the closely related goals of protecting public health and protecting the climate. Consistent with the state's GHG reduction targets, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. The 2017 Clean Air Plan does not contain any specific measures that apply to the project.

Envision San José 2040 General Plan and Greenhouse Gas Reduction Strategy

In 2011, the City adopted the *Envision San José 2040 General Plan* (2040 General Plan). The General Plan identifies policies and measures to reduce GHG generation within the City. Policies relevant to the Project include:

> ***MS-5.6:*** Enhance the construction and demolition debris recycling program to increase diversion from the building sector.

MS-6.3: Encourage the use of locally extracted, manufactured or recycled and reused materials including construction materials and compost.

As part of the General Plan update, the City adopted the *Greenhouse Gas Reduction Strategy for the City of San José* (GHG Reduction Strategy; City of San José, 2015a) in accordance with the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5.The City's GHG Reduction Strategy was approved as part of the City's 2040 General Plan and analyzed in the 2040 General Plan Integrated Final Program Environmental Impact Report (PEIR) (certified in November 2011) and updated in the Supplemental PEIR (certified in December 2015). The City of San José prepared a Supplemental PEIR to supplement the information included in the 2040 General Plan Final PEIR regarding GHG emissions and global climate change. The Supplemental PEIR reevaluated the significance of projected GHG emissions associated with existing and planned land uses in San José and the consistency of the General Plan and GHG Reduction Strategy with the California Climate Change Scoping Plan and other plans (City of San José, 2015b). Compliance with the City's 2040 General Plan and GHG Reduction Strategy would ensure that the Plant Master Plan that was evaluated in the certified EIR is consistent with the State's AB32 goals. In response to SB 32's 2030 goal, the City is currently working to update its GHG Reduction Strategy.

3.6.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of both project- and program-level improvement projects at the Facility and identified the following impacts related to GHGs:

- Both project- and program-level improvements would be consistent with the General Plan GHG Reduction Strategy up to the year 2020, and therefore impacts were determined to be less than significant.

- Subsequent to year 2020, the project- and program-level improvements analyzed in the Plant Master Plan EIR were found to make a cumulatively considerable contribution to City-wide emissions, which were determined by the EIR for the 2040 General Plan to be significant and unavoidable by 2035, even with implementation of the measures contained in the GHG Reduction Strategy. The conclusions in the 2040 General Plan PEIR have not changed based upon the supplemental information on GHG emissions presented in the Supplemental PEIR (certified in December 2015).

Issues	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
VIII. 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?	☐	☐	☐	☒	☐

Discussion

The Plant Master Plan EIR determined that GHG emissions associated with program-level improvements up to year 2020 would be consistent with the City's GHG Reduction Strategy and General Plan and the State's AB 32 GHG emission reduction goals and hence lead to a less-than-significant impact up to year 2020. Subsequent to year 2020, the proposed program-level improvements were determined to make a cumulatively considerable contribution to City-wide emissions that were determined by the EIR for the Envision San José 2040 General Plan to be significant and unavoidable by 2035 even with implementation of the measures contained in the GHG Reduction Strategy.

a), b) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in San José, the entire state of California, across the nation, and around the world contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Construction

The combustion of fuel to provide power for the operation of various construction equipment results in the generation of GHGs. Vehicle trips associated with worker commute and material delivery/hauling would also generate GHGs. As discussed in Section 3.3, Air Quality, construction emissions associated with the Project were estimated using CalEEMod version 2016.3.2 along with Project-specific information on the construction schedule, the types and number of construction equipment by phase, their daily usage in terms of hours per day, and the number of days each piece of equipment is used over the construction period. GHG emissions from vehicle trips to transport workers and materials to and from the Project site were estimated using Project-specific data for construction workers and haul trips by phase. The exact end points for the daily trips are not known at this time, so the on-road emission estimates were developed using default trips lengths in CalEEMod. Appendix D contains the data and assumptions used to estimate the construction-phase GHG emissions that would be associated with the Project.

In addition, indirect GHG emissions would also be generated from the use of electricity for the pumping and distribution of water that would be used for dust suppression during the construction period. It is estimated that approximately 4,000 gallons of water would be used daily on an average for dust suppression. Construction contractors would either use recycled water from the adjacent Silicon Valley Advanced Water Purification Center or from nearby fire hydrants with a flow meter rented from San José Water. Indirect GHG emissions from short-term electricity usage associated with water use for construction activities were estimated using use factors established by the California Energy Commission (CEC)

and emission rates from PG&E and the U.S. Environmental Protection Agency (USEPA) (CEC, 2005; PG&E, 2018; USEPA, 2018).

Table 3.8-1 shows the GHG emissions estimated to be generated by construction activities associated with the Project. As shown in the table, Project construction would generate a total of approximately 17,183 metric tons of CO_2e over the 30-month construction period. The BAAQMD has neither adopted nor recommended GHG thresholds for construction emissions in their CEQA Air Quality Guidelines. Instead it recommends that a determination of the significance of a project's construction emission impacts be made in relation to meeting the State's GHG reduction goals, as described further below. Appendix D contains assumptions, model outputs and details on the calculations used to estimate construction GHG emissions.

TABLE 3.8-1
TOTAL ESTIMATED GHG EMISSIONS FROM CONSTRUCTION

Source	GHG Emissions (metric tons)
	CO_2e
Off-road Construction Equipment & on-road Vehicle Trips	17,182
Indirect Emissions from Water Use for Dust Suppression during Construction	1
Total GHG Emissions	17,183

SOURCE: Appendix D

Operation

Upon completion of construction activities, operational GHG emissions would be minimal and would result from vehicle trips related to inspection and maintenance activities associated with periodic observations for cap maintenance and inspection following significant rain events and/or earthquakes. Cap inspection would be conducted on an annual basis and would therefore generate trips once a year. In addition, maintenance activities would involve mowing and trimming of the area one to four times per year, depending on precipitation and would be completed by four staff members over a two-week period. Post-closure monitoring is expected to consist of cap inspections and surface monitoring for methane; however, methane emissions would be minimal given the age of the biosolids. GHG emissions generated from these maintenance and operational activities would be minimal and are expected to be well below the BAAQMD's operational threshold of 1,100 metric tons CO_2e per year.

Consistency of Project Emissions with AB 32 and SB 32 GHG Reduction Goals

The GHG Reduction Strategy adopted by the City as a part of the 2040 General Plan meets the recommended considerations outlined in CEQA Guidelines Section 15064.4 and the recent standards for "qualified plans" as set forth by the BAAQMD. The GHG Reduction Strategy includes policies and measures to reduce GHG emissions consistent with the reduction targets set by AB 32 (City of San José, 2015a). Adoption of a GHG Reduction

Strategy provides environmental clearance for GHG impacts of proposed development as per the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5. Project evaluation in light of City requirements is conducted by evaluating Project conformance with the City's GHG Reduction Strategy and in turn the GHG Reduction Strategy's implementation of the AB 32 GHG reduction goals.

The EIR for the 2040 General Plan estimated the City's 2020 GHG emissions to be below the average carbon-efficiency standard necessary to meet the statewide 2020 goals as established by AB 32 and therefore determined that implementation of the 2040 General Plan through 2020 would not constitute a cumulatively considerable contribution to global climate change. However, beyond 2020, though the City's GHG Reduction Strategy includes adaptive management measures in the form of voluntary and mandatory measures to incorporate additional GHG reduction measures in the future, due to uncertainties about the feasibility of achieving the sizable emissions reductions needed to meet California's long-term goal of an 80 percent reduction in GHG emissions compared to 1990 levels, the City's projected 2035 GHG emissions, was found to constitute a cumulatively considerable contribution to global climate change and lead to a significant and unavoidable impact (City of San José, 2015b).

In order to conform to the GHG Reduction Strategy, projects must be consistent with the Land Use/Transportation assumptions in the 2040 General Plan and incorporate applicable features into the project that meet the mandatory implementation policies. The Project would not involve changes in land uses beyond those already approved for the Plant Master Plan nor would it change population and vehicle travel assumptions as envisioned under the 2040 General Plan, and therefore, would be consistent with the Land Use/Transportation assumptions. The Project does not involve construction of any structures that would be subject to the City's Green Building Ordinance consistent with the GHG Reduction Strategy. Therefore, the Project would be considered to be consistent with the GHG Reduction Strategy. However, as the Project would be implemented beyond 2020, it would make a cumulatively considerable contribution to the City-wide emissions that were determined by the General Plan EIR to be significance and unavoidable by 2035 even with implementation of the measures in the GHG Reduction Strategy. Consequently, based on the City's current GHG Reduction Strategy, it would be considered to conflict with the State's long-term emissions reduction goals.

The City is currently working to update its GHG Reduction Strategy in response to the interim goal set by SB 32 for 2030 and therefore does not yet provide direction for the evaluation of project consistency with the goals of SB 32. However, the 2017 Scoping Plan update prepared in response to SB 32 goals does not include any specific measures that can be implemented by the project. According to the 2017 Scoping Plan Update, reductions needed to achieve the 2030 target are expected to be achieved by increasing the Renewable Portfolio Standards to 50 percent of the State's electricity by 2030, increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting high speed rail and other alternative transportation options, and increasing the use of high efficiency appliances, water heaters, and HVAC

systems. The Project would not impede implementation of these potential reduction strategies identified by CARB, and it would benefit from statewide efforts towards increasing the fuel economy standards of vehicles and reducing the carbon content of fuels. Further, after the completion of construction activities in 2023, project emissions would reduce drastically and are not expected to conflict with the objectives of the 2017 Scoping Plan Update.

Overall, this would be a significant impact based on the City's current GHG Reduction Strategy. This impact would be the same as identified in the Plant Master Plan EIR, and would not result in any new or more significant impacts beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Significant and Unavoidable)**

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3.7 Hazards and Hazardous Materials

3.7.1 Setting

Environmental Setting

This discussion of the potential presence of hazardous materials at the Project area is based on the results of regulatory agency database searches using the California State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB, 2019) and the California Department of Toxic Substances Control (DTSC) EnviroStor database (DTSC, 2019). The GeoTracker database includes the following hazardous materials site lists: leaking underground storage tank (LUST) cleanup sites; spills, leaks, investigation and cleanup (SLIC) sites; permitted underground storage tank (UST) facilities; land disposal sites; military cleanup sites; and other cleanup sites. The EnviroStor database includes federal Superfund, state response, voluntary cleanup, school cleanup, and hazardous waste corrective action. Nearby landfill facilities were identified by the database searches. The DTSC is also responsible for updating the Hazardous Waste and Substances Site List (Cortese List). The list is a planning document used by state and local agencies and developers to comply with CEQA requirements by providing location information for hazardous material release sites.

Hazardous Materials Database Search

Three hazardous materials sites are within approximately 0.5 miles of the Project site. Two closed sites are mapped as being more than 0.5 miles southwest of the Project site, but have the same address as other sites within the 0.5-miles radius of the Project site.

The Project site itself is one of the three listed hazardous materials sites, and is included based on the presence of the legacy biosolids, which contain elevated levels of metals. As described in greater detail in Chapter 2, the Project would consolidate and cap the legacy biosolids within the Project site, consistent with the San Francisco Bay Regional Water Quality Control Board Order No. R2-2019-0026 (see Appendix A). The other two sites within 0.5 miles of the Project site are:

- **San José Water Pollution Control Plant (Cleanup Status: Open-Inactive as of 9/23/2015)**. Possible groundwater and soil contamination by diesel fuel. Approximately 20,000 gallons of diesel were removed from an excavation during activities pertaining to the construction of the South Bay Water Recycling Project. An additional 2.91 million gallons of groundwater containing dissolved diesel but no free product[39] were extracted and treated from 9/9/1997 through 2/10/1998. The site underwent remediation in April of 1997 and is listed as "open-inactive" as of September of 2015 (SWRCB, 2019). This site is located approximately 1,050 feet to the southeast of Project activities (DTSC, 2019; SWRCB, 2019).

- **Zanker Road Class III Landfill (L10002780473) – (Land Disposal Site, Status: Open – Closed with Monitoring as of 12/15/2014)**. The Zanker Road Resource Recovery Operation and Landfill, formerly the Zanker Road Class III Landfill, is a 46-acre waste management unit located within a 70-acre property that is part of the former 166-acre Nine-Par Disposal Site. The waste management unit includes approximately 41 acres of closed landfill and an

[39] "Free product" refers to petroleum products not mixed with water.

unfilled 5-acre processing area used for resource recovery. The landfill is less than 1,000 feet west of the western Project site boundary. The landfill has accepted per- and polyfluoroalkyl substances among other wastes.[40] The regional horizontal groundwater gradient is generally to the north; historical groundwater measurements at the site generally have shown higher water levels in the south and southeast corner of the site with gradients to the west and northwest (Golder Associates Inc., 2019).

Regulatory Setting

The regulatory setting for hazardous materials in the Plant Master Plan area is described in Plant Master Plan EIR Section 4.11.2. Elements of the regulatory setting for hazardous materials identified in the Plant Master Plan EIR have not notably changed since 2013 with the exception of the following Emergency Response information. Elements of the regulatory setting that have not changed since 2013 are incorporated by reference in the impact analysis in Section 3.6.2 of this document.

Local

Emergency Response

The Santa Clara County Operational Emergency Operations Plan (Santa Clara County, 2008) establishes emergency organizations, assigns tasks, specifies policies and general procedures, and provides for coordination of response in the event of an emergency. However, the plan does not identify specific emergency response or evacuation routes within or surrounding the Facility. The Facility has developed a Contingency Plan for Operation Under Emergency Conditions (Contingency Plan) as required by the Facility's NPDES permit (RWQCB, 2015). This Contingency Plan outlines actions required at the Facility in response to extreme flooding, earthquakes, fire, and accidental release of hazardous materials. In the case of an ammonia, chlorine, or sodium bisulfate release, should nonessential Facility personnel need to be evacuated, the Contingency Plan indicates personnel should proceed south along Zanker Road and should not proceed on Los Esteros Road.

3.7.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of the Plant Master Plan. The Plant Master Plan EIR identified the following impacts related to hazards and hazardous materials:

- No impact for potential public or private airport related safety hazards, for emission or handling of hazardous substances within a quarter mile of a school, or potential interference with emergency plans.
- Less-than-significant impacts for potential hazards associated with the accidental release of hazardous building and construction materials, transport or use of hazardous materials, and potential exposure to fires.

[40] Per- and polyfluoroalkyl substances (PFAS) are a class of manufactured compounds that are extensively used to make everyday items more resistant to stains, grease, and water. These chemicals have been used in a variety of industrial, commercial, and consumer products.

- Potentially significant but mitigable to less-than-significant impacts for accidental release of hazardous materials in the soil and groundwater into the environment, activities located on a hazardous materials site, and accident conditions related to rupture of subsurface utilities. Mitigation applied to these potential impacts included a pre-construction hazardous materials assessment, implementation of a health and safety plan, implementation of a soil and groundwater management plan, and coordination with regulatory agencies and utility providers.

Issues	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
IX. 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 which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	☐
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 or excessive noise for people residing or working in the project area?	☐	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒	☐

Discussion

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

Construction

Project construction could involve the routine use of small quantities of hazardous materials commonly used during construction activities such as fuels, lubricants and oil for construction equipment. Storage and use of hazardous materials at the construction site during routine use could result in the accidental release of small quantities of hazardous materials, which could degrade soil and/or surface water within the Project area. This impact would be potentially significant. Project construction would require implementation of best management practices, to minimize the risk of a hazardous

materials release during construction activities, further discussed under Section 3.7, *Hydrology and Water Quality*.

With implementation of best management practices identified in the stormwater pollution prevention plan required for Project construction, impacts associated with hazards and hazardous materials from Project construction would be the same as identified in the Plant Master Plan EIR and the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

The Project would not routinely transport, use, or dispose of hazardous materials during operations.

This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts during operation beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant Impact)**

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.*

Construction

As mentioned above, the Facility is located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) and documented releases of hazardous materials have been identified within and adjacent to the Facility. As described in Chapter 2, *Project Description*, sampling and analysis of the legacy biosolids has determined some of the biosolids material may be characterized as hazardous waste as defined in Title 22 Section 66261.24 of the California Code of Regulations due to the exceedances of the California soluble threshold limit concentrations (STLC) for cadmium, lead, and chromium, and is a potential threat to human health and the environment. The Department of Toxic Substances Control and the RWQCB have agreed that the RWQCB will act as the primary agency for overseeing cleanup and closure of the Project site. The City is designing the Project to be consistent with requirements of the RWQCB Order. The City has developed a Closure Plan pursuant to the RWQCB Order, which would be reviewed and approved by the RWQCB and includes approaches for handling and management of potentially contaminated material (Cornerstone Earth Group, 2020). No potentially hazardous soil or groundwater would be hauled offsite. RWQCB's oversight of the investigation and remediation of the legacy biosolids is designed to ensure protection of the environment and human health during and after construction activities in the inactive lagoons, which would substantially meet the requirements of Plant Master Plan Mitigation Measure HAZ-1d: Coordination with Regulatory Agencies. However, during interim and long-term consolidation activities, construction workers could be exposed to

the legacy biosolids. The mitigation measure below is based on **Mitigation Measure HAZ-1b: Health and Safety Plan** from the Plant Master Plan EIR and includes updates to reflect refinements to the mitigation measures to address Project conditions particular to the Legacy Lagoons project.[41] The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR. Implementation of **Mitigation Measure HAZ-1b: Health and Safety Plan**, listed below, would protect workers and the environment from harm associated with exposure to the legacy biosolids, reducing impacts to a less-than-significant level, same as those identified in the Plant Master Plan EIR.

Mitigation Measure HAZ-1b: Health and Safety Plan

The City shall require the construction contractor to retain a qualified health and safety professional to prepare a site-specific Health and Safety Plan (HASP) in accordance with federal OSHA regulations (29 CFR 1910.120) and Cal/OSHA regulations (8 CCR Title 8, Section 5192), to be implemented during construction. The HASP shall address site-specific worker health and safety issues during construction of the project. The HASP shall include the following information:

- Results of soil sampling reported in the Closure Plan.
- All required measures to protect construction workers and the general public by including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction area and to reduce hazards outside of the construction area. If prescribed contaminant exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations.
- Required worker health and safety provisions for all workers potentially exposed to contaminated materials, in accordance with state and federal worker safety regulations, and designated qualified individual personnel responsible for implementation of the HASP.
- Documentation that HASP measures have been implemented during construction.
- Provision that submittal of the HASP to ESD, or any review of the contractor's HASP by ESD, shall not be construed as approval of the adequacy of the contractor as a health and safety professional, the contractor's HASP, or any safety measure taken in or near the construction site. The contractor shall be solely and fully responsible for compliance with all laws, rules, and regulations applicable to health and safety during the performance of the construction work.

With implementation of **Mitigation Measure HAZ-1b: Health and Safety Plan** and best management practices identified in the stormwater pollution prevention plan required for Project construction, impacts associated with hazards and hazardous

[41] The Project-specific soil testing determined that the contaminants present are the biosolids, but other types of contaminants are not widespread at the site (such as petroleum products; Cornerstone Earth Group, 2020). Given the results of soil testing, a separate health and safety supervisor to monitor for soil staining, debris, or buried tanks not needed.

materials from Project construction would be the same as identified in the Plant Master Plan EIR and the Project would not result in any new or more significant impacts than those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

In compliance with RWQCB Order Number R2-2019-0026, the City would remediate the inactive biosolids lagoons. The remediation would include moving all legacy biosolids into a consolidation area with appropriate containment features. As described in Chapter 2, consolidation would occur in two phases: Phase 1 would involve removing vegetation from and otherwise preparing the interim consolidation area (Lagoons L13 through L-15), transporting legacy biosolids from Lagoons L-16 through L-19 to the interim consolidation area and, if Phase 2 does not proceed 180 days after the completion of Phase 1, placing an interim cap. Phase 2 would involve removing vegetation within and otherwise preparing the long-term consolidation area (shown in Figure 2-6), removing the interim cap, if needed, and transporting all legacy biosolids to the long-term consolidation area. An erosion-resistant cap would then be placed on the long-term consolidation area.

The cap material would either be non-hazardous berm material (See Section 2.2 Project Background) or material imported from an offsite source; in either case, the material must meet the minimum geotechnical and water quality requirements, approved by the RWQCB.

Once construction of the cap has been completed, the City would monitor the capped consolidation area annually. The purpose of post-closure monitoring would be to help confirm the integrity of the engineered cap installed over the consolidated biosolids. Post-closure monitoring is expected to consist of cap inspections and surface monitoring for methane.

As discussed in Appendix A, the DTSC and the RWQCB have agreed the RWQCB will act as the primary agency for overseeing cleanup and closure of the Project site. The City is designing the Project to be consistent with requirements of the RWQCB Order. RWQCB oversight of the investigation and remediation of the legacy biosolids is designed to ensure protection of the environment and human health during and after construction activities in the inactive lagoons, which would substantially meet the requirements of Plant Master Plan Mitigation Measure HAZ-1d. Additionally, the RWQCB will coordinate with other local, state, and federal agencies, including DTSC as required for closure of the Project site. Operation of the Project would not create a significant hazard to the public related to hazardous materials.

This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts during operation beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant Impact)**

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

Construction and Operation

As discussed in the Plant Master Plan EIR, there are no schools within 0.25-miles of the Plant Master Plan area, which includes the Project site. This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts during construction and operation beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

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

Construction

As mentioned above, the Facility is located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) and documented releases of hazardous materials have been identified within and adjacent to the Facility. During interim and long-term consolidation activities, construction workers could be exposed to the legacy biosolids, which are a potential threat to human health and the environment as discussed in item b) above. Implementation of Plant Master Plan EIR **Mitigation Measure HAZ-1b: Health and Safety Plan**, discussed in item b) above, would protect workers and the environment from harm associated with exposure to the legacy biosolids, reducing impacts to a less-than-significant level, same as those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

Operation

As discussed in item b) above, in compliance with RWQCB Order Number R2-2019-0026, the City would remediate the inactive biosolids lagoons. The remediation would include moving all legacy biosolids into a consolidation area with appropriate containment features. Operation of the Project would not create a significant hazard to the public related to hazardous materials, and would be designed to achieve case closure for the site such that it would no longer be included on the Cortese list.

This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts during operation beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant Impact)**

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 or excessive noise for people residing or working in the project area.*

Construction and Operation

The Project area is not located within an airport land use plan and is not within two miles of an airport. The nearest airports to the Project are the Norman Y. Mineta San José International Airport, located approximately 4.5 miles south of the Project area and the Moffett Federal Airfield, located approximately 5 miles southwest of the Project area. This impact would be the same as identified in the Plant Master Plan EIR, and the Project would not result in any new or more significant impacts during construction and operation beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (No Impact)**

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.*

Construction and Operation

Santa Clara County does not have an adopted emergency response plan or emergency evacuation plan that designates specific emergency response or evacuation routes within the Project area. The Facility would follow the emergency Contingency Plan during operation if there is an accidental release of hazardous materials. Construction and operation of the Project would not affect evacuation routes and therefore would have no impact on emergency response or evacuation plans. **Same Impact as Approved Project (No Impact)**

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.*

Construction and Operation

Based upon fire hazard mapping by the CAL FIRE Forest Resource Assessment Program (CAL FIRE, 2007) and the Santa Clara County Wildland Urban Fire Interface Map (Santa Clara County, 2009), the Project site is not within a high fire hazard area. The use of construction equipment and the possible temporary on-site storage of fuels and/or other flammable construction chemicals could pose an increased fire risk resulting in injury to workers or the public during construction. However, contractors would be required to comply with hazardous materials storage and fire protection regulations. Post-closure monitoring would include surface monitoring for methane, and any other requirements identified by the RWQCB in its review of the required closure plan for Phase 2. Through compliance with legal requirements related to hazardous materials storage, fire protection, and landfill gas monitoring, potential risks of fire associated with construction and operation of the Project would be the same as those in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

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3.8 Hydrology and Water Quality

3.8.1 Setting

The Project is located within the Plant Master Plan area. Minor changes to Environmental Setting information relevant to hydrology and water quality within the Project are included in this section, to clarify and amplify Plant Master Plan EIR information relevant to the Project site. This section also summarizes City actions relevant to hydrology and water quality that have occurred since approval of the Plant Master Plan.

Environmental Setting

Surface Water

The Project site contains wetlands within the legacy lagoons disconnected from nearby maintained channels by the berms surrounding each lagoon. The Eastern Drainage Channel, which separates the Project site into eastern and western areas, collects runoff from immediately adjacent berm slopes starting approximately 500 feet east of Zanker Road and drains to the Nine-par Channel that borders the southern levee of Pond A18 to the north of the Project site, shown on **Figure 3.7-1**. The Nine-par Channel is connected to Artesian Slough and the Coyote Creek Bypass on either end by leaky gated culverts. Water flows from east to west in Nine-par channel, discharging into Artesian Slough through a culvert with gates (except during high tide, when the pressure of water in Nine-par Channel is not sufficient to flow into Artesian Slough). Minor amounts of water from Artesian Slough leaks through the gates into Nine-par Channel, but water levels in Nine-par Channel are not substantially influenced by inflow of tidal waters from Artesian Slough. Minor amounts of water may also exchange between Nine-par Channel and the Coyote Creek Bypass area; however, the culverts are filled with sediment, limiting flow between Nine-par Channel and the Coyote Creek Bypass area.

Other nearby surface water features include Pond A18 to the north, Artesian Slough approximately 2,200 feet to the west and southwest, and Coyote Creek approximately 3,200 feet to the northeast. Artesian Slough is a tributary of Coyote Creek, which flows into south San Francisco Bay.

Coyote Creek is a waterway currently proposed for listing on the San Francisco Bay Regional Water Quality Control Board (RWQCB) 303(d) list of impaired waterways for toxicity, in addition to being listed for Diazinon and trash (RWQCB, 2016).[42] The receiving waters of South San Francisco Bay are listed as impaired for pollutants including PCBs and dioxin-like PCBs, chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, mercury, and selenium (RWQCB, 2016). The sources of these pollutants are listed as "unknown;" however, past and current land uses (including agricultural production, industry, and urban areas) are generally understood to be the source of these types of pollutants.

[42] The Federal Clean Water Act, Section 303(d) list of impaired waterways is a list including water bodies and surface waters exceeding pollutant levels or not meeting protective water quality standards.

SFO\13xxxx\D131002.26 - Legacy Lagoons Cleanup\05 Graphics-GIS-Modeling\Illustrator

SOURCE: ESA, 2019

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 3.7-1
Existing Hydrologic Infrastructure in the Project Vicinity

ESA

Groundwater

The Project site is within the Santa Clara Valley Groundwater Basin, Santa Clara Subbasin, which is designated by the California Department of Water Resources as a high priority basin for purposes of groundwater sustainability planning (DWR, 2019). Groundwater quality in the basin is generally very good, although substances such as nitrate, salts, metals, microbes, inorganic and organic contaminants may be present in trace amounts (Santa Clara Valley Water District, 2019). The regional horizontal groundwater gradient in the Project vicinity is generally to the north; historical groundwater measurements at the Zanker Road Resource Recovery Operation and Landfill west of the site generally have shown higher water levels in the south and southeast corner of the site with gradients to the west and northwest (Golder Associates Inc., 2019). Near the Project site, groundwater is present approximately 12 to 15 feet below mean sea level, and is recharged from local runoff and percolation. The quality of this groundwater is generally poor because of extensive saltwater intrusion. Since the total dissolved solids of this groundwater exceeds 30,000 milligrams/liter, domestic water supply is not considered a probable future beneficial use of the local groundwater.

Flooding

The Project would be located entirely within a 100-year flood zone defined by Federal Emergency Management Agency (FEMA) as a Special Flood Hazard Area shown on **Figure 3.7-2** (Zone AE with a base flood elevation of 12 feet, as denoted by FEMA flood insurance rate maps; FEMA, 2019). The 100-year flood zone includes areas that have a one-percent annual chance of a flood occurrence in any given year. The Facility is primarily vulnerable to coastal flooding, and the existing system of berms and ponds, including Pond A18, and the inactive and active biosolids lagoons provide some level of flood protection from the San Francisco Bay and Coyote Creek (San José-Santa Clara Regional Wastewater Facility, 2016).

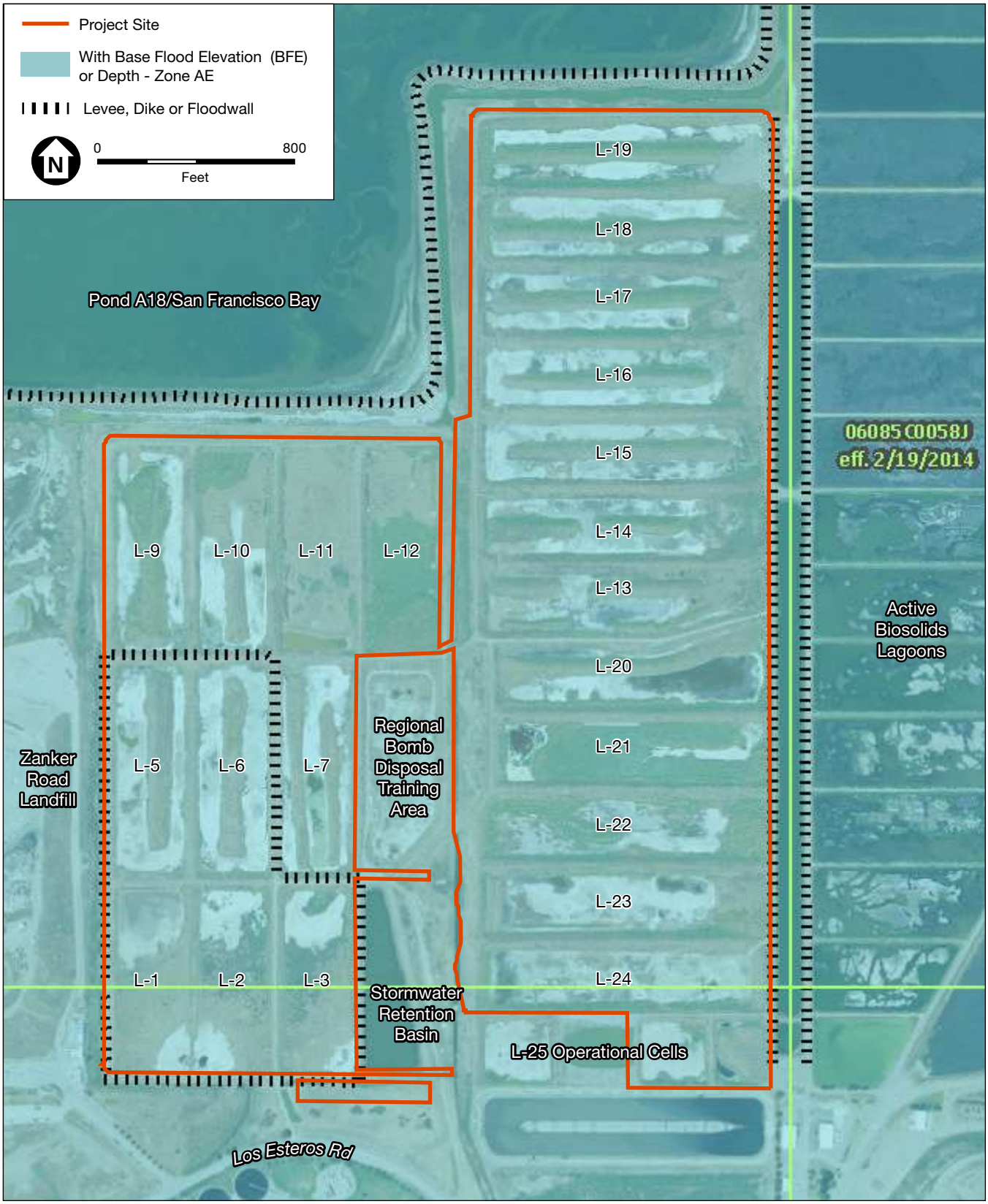
Regulatory Setting

The regulatory setting for hydrology and water quality in the Plant Master Plan area is described in Plant Master Plan EIR Sections 4.9.2 and 4.10.2, respectively. Elements of the regulatory setting for hydrology and water quality identified in the Plant Master Plan EIR have not notably changed since 2013 with the exception of the following groundwater and flooding information. Elements of the regulatory setting for hydrology and water quality that have not notably changed are incorporated by reference in the impact analysis in Section 3.7.2 of this document.

State

Groundwater

Additional legislation and regulations related to groundwater have been adopted since certification of the Plant Master Plan EIR. On May 24, 2016, the Santa Clara Valley Water District adopted Resolution No. 16-51 establishing the Santa Clara Valley Water District (now Santa Clara Valley Water) as the groundwater sustainability agency for the Santa Clara groundwater subbasin.



SFO\13xxxx\D131002.26 - Legacy Lagoons Cleanup\05 Graphics-GIS-Modeling\Illustrator

SOURCE: FEMA, 2019; ESA, 2020

San José-Santa Clara Regional Wastewater Facility Legacy Biosolids Lagoons Site Cleanup

Figure 3.7-2
Flood Hazard Map

ESA

The *2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins* (GWMP) was adopted on November 22, 2016, and was submitted to the California Department of Water Resources as an alternative to a groundwater sustainability plan on December 21, 2016 (Santa Clara Valley Water District, 2016). The GWMP identifies groundwater recharge areas, water budgets, and sustainability goals, and describes programs and activities to maintain a reliable groundwater supply and protect groundwater quality.

Local

Flooding

Since certification of the Plant Master Plan EIR, the City has undertaken flood protection planning for the Facility, and in 2016 identified recommendations and guidelines for flood protection for future CIP Projects at the Facility (called the "Flood Protection Guidelines"). The purpose of the Flood Protection Guidelines is to provide the Facility with a set of guidelines to follow in order to adequately protect existing and future planned facilities from potential flooding that could reach the Facility (including sea level rise).

Guidelines for both existing and new structures were developed, addressing different categories and subcategories of facilities, such as below grade, at grade, and above grade structures. The recommendations in the Flood Protection Guidelines consider the City's 2040 General Plan language (specifying that the Facility be protected from the 500-year recurrence interval event) as the governing requirement and design basis, as it is the strictest and most closely reflects the national standard for critical facilities used by FEMA.

The Flood Protection Guidelines identify two preferred options for overall Facility flood protection, one option to be implemented if the Shoreline Project is not constructed, and one option if the Shoreline Project is constructed. Without the Shoreline Project, a system of interconnected engineered berms at elevation 14.6 feet NAVD88 (representing the 500-year flood elevation plus an upper range estimate of sea level rise, without freeboard) around the main Facility operational area is recommended. With the Shoreline Project, a similar system of interconnected engineered berms around the Facility, to an elevation of 13.1 feet NAVD88 (representing the 500-year flood elevation without sea level rise or freeboard), is recommended.

3.8.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of the Plant Master Plan, including projects affecting areas adjacent to the Project. The Plant Master Plan EIR identified the following impacts related to hydrology and water quality:

- No impact related to placing housing within a 100-year flood hazard area and exposure of people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.
- Less than significant impacts for degradation of receiving waters due to generation and emission of construction-related water quality pollutants, reduced water quality downstream of the project site due to storm water discharges during project operations, alteration of downstream/receiving water quality, and increased risks associated with coastal flooding.

- Potentially significant, but mitigable to less than significant, impacts for potential for increased scour and erosion from restoration of Pond A18, alteration of pond or downstream water quality due to proposed operations of Pond A18, increased risk of flooding due to runoff associated with increases in impervious area, potential to cause saltwater intrusion of regional groundwater sources, and depletion of groundwater supplies or interference with groundwater recharge.

Issues	*New Potentially Significant Impact*	*New Less Than Significant Impact with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
X. HYDROLOGY AND WATER QUALITY — Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒	☐
iii) 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; or	☐	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation?	☐	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒	☐

Discussion

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.*

Construction.

Phase 1. During Phase 1, legacy biosolids in Lagoons L-16 to L-19 would be excavated and deposited in Lagoons L-9 to L-12, as shown on Figure 2-7. Internal berms between these lagoons would not be substantially altered or graded, and the berms surrounding Lagoons L-9 to L-12 would provide containment of the legacy biosolids relocated there. Similar to current conditions, the berms would contain any precipitation that lands on the legacy biosolids in the interim consolidation area. No grading would occur along the

Eastern Drainage Channel, but vehicles would cross the channel using an existing vehicle access road. Phase 1 activities would disturb more than one acre of land. The City and/or contractor would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) through development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify site-specific best management practices (BMPs) designed to control stormwater at the Project site and limit the amount of runoff leaving the construction site. Once the legacy biosolids from Lagoons L-16 through L-19 have been moved to Lagoons L-9 through L-12, an interim cover or cap may also be placed on top of the biosolids in Lagoons L-9 through L-12; the cover or cap would limit contact between precipitation and the biosolids. Implementation of the BMPs and the presence of existing berms surrounding the individual lagoons would minimize the discharge of potential water quality pollutants associated with construction activities and reduce water quality impacts during construction such that impacts would be the same as identified in the Plant Master Plan EIR.

Phase 2. Internal berms at the Project site would be graded during Phase 2. Drainage from the Project site eventually discharges into the San Francisco Bay. Therefore, discharges from construction activities during Phase 2 could result in the degradation of water quality within tributaries that receive stormwater from the Project site (such as Artesian Slough). Degradation of water quality along these waterways could in turn affect beneficial uses[43], and could result in exceedance of water quality objectives.[44] Much of the Project area would be disturbed during construction, and because the disturbance would exceed one acre, the City and/or contractor would be required to comply with the NPDES General Construction Activity Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) through development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), similar to Phase 1. Implementation of the BMPs would minimize the discharge of potential water quality pollutants associated with construction activities and reduce water quality impacts during construction such that impacts would be the same as identified in the Plant Master Plan EIR. Project construction would not result in any new or more significant impacts beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

The Project would consolidate and cap potential water quality contaminants present at the Project site, in accordance with the site cleanup requirements in the RWQCB Order No. R2-2019-0026. The cap would be designed to contain the biosolids such that surface

[43] Beneficial uses in this context refers to the resources, services, and qualities of aquatic systems that are the ultimate goals of protecting and achieving high water quality. Examples include municipal and domestic water supply, estuarine habitat, and water contact recreation.

[44] Water quality objectives reflect Clean Water Act requirements and state requirements and are included in the San Francisco Bay Basin Plan.

water and groundwater quality are protected. The consolidation area would be placed overlying young bay mud, similar to current conditions, which has very low infiltration rates (as under existing conditions surface water remains ponded in the lagoons after precipitation events). The City would monitor and inspect the cap to confirm the integrity of the cap. The City would grade and compact the remaining areas of the Project site such that stormwater flows away from areas that may be used for future Facility operations and into the Eastern Drainage Channel. Due to the presence of bermed former Lagoons L-4 and L-8, which cannot be graded as part of the Project, underground drains may be installed to connect Lagoons L-1 to L-3 and L-5 to L-7 to the Eastern Drainage Channel (shown on Figure 2-10). This would represent a new source of discharge to the Eastern Drainage Channel, which could introduce new pollutants, if present, to the Eastern Drainage Channel. However, the Project would consolidate and cap the existing legacy biosolids, leaving the native young bay mud at the surface. The gradients of the most of the Project site would be very low (less than 1 percent), with the exception of the existing outer berms along the project site edges (which would not be altered by the project) and the sloped edges of the consolidation area. No pesticides or other substances for which Coyote Creek and South San Francisco Bay are listed as impaired would be used during Project operations. The likelihood that pollutants would be released to the Eastern Drainage Channel during operations is thus remote.

Regardless, due to the addition of the impervious approximately 30-acre long-term consolidation area, the project would be required to comply with either site-specific waste discharge requirements issued by the RWQCB or the Municipal Regional Stormwater Permit (MRP) and the City's Post-Construction Urban Runoff Management Policy (6-29). Given that the project would create more than 10,000 square feet of impervious area, pursuant to Provision C.3 of the MRP, the project would be regulated and required to incorporate low impact design (LID) practices, such as site design, pollutant source control and stormwater treatment control measures aimed to minimize and properly treat stormwater runoff and maintain or restore the site's natural hydrologic functions. Where suitable, stormwater treatment control measures may include systems such as bioretention areas that promote stormwater infiltration, storage, detention, evapotranspiration, and/or biotreatment rather than offsite conveyance. The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

With implementation of LID measures or other requirements issued by the RWQCB, impacts related to the degradation of receiving waters due to Project operations would be the same as identified in the previously approved Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.*

Construction and Operation

The Project would be located in the Santa Clara Valley Groundwater Basin, which is identified as a high priority basin, although not one subject to conditions of critical overdraft (SCVWD, 2016). Salt water intrusion and subsidence have been identified as key issues associated with the basin (SCVWD, 2016). The Project would not install paving or otherwise interfere with conditions for recharge of groundwater resources. Construction, operation and maintenance of the Project would not require ongoing extraction or use of groundwater such that supplies would be decreased. There would be no impact on groundwater supplies as a result of construction or operation of the Project. Therefore, Project operations would not result in any new or more significant impacts related to sustainable groundwater management beyond those identified in the Plant Master Plan EIR. **Less Impact than Approved Project. (No Impact)**

c.i, ii, iii) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; or (iii) 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.*

The Project would alter existing drainage at the Project site in phases. Phase 1 would have no effect on existing drainage patterns outside of individual lagoons because none of the internal or external berms surrounding the lagoons would be removed or regraded, and no work would occur in the Eastern Drainage Channel. Lagoons L-16 to L-19 would then be transferred for use in the Shoreline Project. During Phase 2, internal berms within the Phase 2 lagoons area (shown on Figure 2-8) would be removed and regraded, and the legacy biosolids would be consolidated in an approximately 30-acre area and capped, resulting in mounded topography extending up to 10 feet above the existing berms.

Construction

As noted above, Phase 1 would have no effect on existing drainage patterns outside of the individual lagoons. Within individual Lagoons L-16 through L-19, the legacy biosolids would be excavated into haul trucks and before being placed in Lagoons L-9 through L-12. Sediments from the surrounding berms of Lagoons L-16 through L-19 could be disturbed and alter drainage patterns within the individual Lagoons L-16 through L-19 and L-9 through L-12. As described in item a), the City or its contractor would implement SWPPPP BMPs developed consistent with requirements of the Construction General Permit, which would control the flow of stormwater to limit the release of pollutants, including sediment. Storm water controls would limit changes in erosion, sedimentation, and flooding during Phase 1 construction to less-than-significant amounts.

Phase 2 construction grading and excavation activities could result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in the runoff. If graded areas and/or soil stockpiles are not managed properly and protected against stormwater

flows, high sediment loads in stormwater runoff could clog drainage pipes or otherwise decrease the carrying capacity of drainage channels, potentially resulting in increases in localized ponding or flooding. However, as discussed above in item a), the ESD or its contractor would be required to comply with the General Construction Permit through development and implementation of a SWPPP. The SWPPP would also contain measures to reduce delivery of silt and sediment on- and off-site. By implementing BMPs required as part of the SWPPP prepared in compliance with this permit, the effects of Project construction activity on drainage patterns, flooding, and stormwater drainage facilities would be the same as those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

Once Phase 2 is complete, with the exception of the shoreline lagoons (L-16 to L-19), the Project area may drain to the Eastern Drainage Channel. This may include two 48-inch pipelines to be installed to drain the southwestern area of the Project site (Lagoons L-1 to L-3 and L-5 to L-7). As discussed in Section 2.5.4, the City may conduct a drainage assessment for the Phase 2 lagoons area. Given the very low gradient of the Eastern Drainage Channel, and the low gradient of the Project area once Phase 2 is complete, new erosion or sedimentation in the channel is unlikely. However, additional runoff may pool within the Phase 2 lagoons area, and eventually enter the Eastern Drainage Channel, and some additional sedimentation within the channel may occur associated with the increased volumes of ponded water in the channel. As discussed in the Plant Master Plan EIR (Impact HYD-1), impacts related to alteration of drainage patterns that could result in on- or offsite flooding would be considered significant if increases in the volume and rate of runoff associated with Plant Master Plan components would be sufficient to result in the inundation of important structures and plant facilities (that are not already subject to flooding or ponding during peak rain events), or result in the release of untreated sewage in a 100-year runoff event. The additional runoff routed to the Eastern Drainage Channel may increase the volume of water in the channel during a high-runoff event which could result in inundation of important structures and plant facilities if associated drainage facilities are not properly designed. Implementation of **Mitigation Measure HYD-1: Phase 2 Lagoons Drainage Plan**, would control potential changes in erosion, sedimentation, or flooding such that associated impacts would be less than significant. The mitigation measure below is based on **Mitigation Measure HYD-1: Comprehensive Drainage Plan** from the Plant Master Plan EIR and includes updates to reflect refinements to the mitigation measures to address Project conditions particular to the Legacy Lagoons project.[45] The adjusted mitigation measure does not change the original impact conclusion, nor is it considerably different from that analyzed in the Plant Master Plan EIR.

[45] Mitigation Measure HYD-1 from the Plant Master Plan EIR described a comprehensive drainage plan for the full future Facility operational area, including the legacy lagoons area. To make this measure project-specific, the measure has been modified to focus on the legacy lagoons area in greater detail and reflect current refined Project plans for the area.

Mitigation Measure HYD-1: Phase 2 Lagoons Drainage Plan

During Phase 2 design, ESD shall prepare a Phase 2 lagoons area drainage plan to ensure that, once Phase 2 is complete:

- Increased stormwater runoff volume or duration caused by the cleanup that may result in new erosion, sedimentation, or inundation of critical Facility structures or plant facilities are to be consistent with stormwater control requirements specified by the RWQCB; and
- Drainage infrastructure, including culverts or pipelines, is designed to avoid inundation of important structures and plant facilities and to be consistent with MRP requirements or other stormwater control requirements specified by the RWQCB.

As discussed in item a), the runoff routed to the Eastern Drainage Channel would not contain pollutants, based on the cleanup actions and the proposed use of the site once cleanup is complete. Therefore, the Project would not provide substantial additional sources of polluted runoff.

With implementation of **Mitigation Measure HYD-1: Phase 2 Lagoons Drainage Plan**, the Project would not result in any new or more significant impacts related to these criteria beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant with Mitigation)**

c.iv) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.*

The Facility and the entire Project area is located in a 100-year flood zone, defined by FEMA as a Special Flood Hazard Area (Zone AE with a base flood elevation of 12 feet).

Construction

Construction activities would be temporary and would not be anticipated to impede or redirect flood flows.

Operation

Once the Project is complete, the Project area could experience coastal flooding until the Shoreline Project is completed. Due to the nature of coastal flooding, which is a function of wave run-up and topographic elevations over large expanses of the shoreline, displacement of water due to the presence of the consolidation area would not affect surrounding water surface elevations during a tidal flood, or result in additional areas becoming inundated. The Project would therefore have less-than-significant impacts related to impeding or redirecting flood flows. Flood hazards at the site would be reduced once the Shoreline Project is complete. Item c.iii) discusses changes in flooding generated by new impervious areas.

Impacts related to this criterion from Project construction and operation would remain the same as those identified in the previously approved Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

d) *In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation.*

The Project is not located in a tsunami or seiche inundation zone; thus, there is no risk of release of pollutants as a result of these hazards. The Facility and the entire Project area is located in a 100-year flood zone, defined by FEMA as a Special Flood Hazard Area (Zone AE with a base flood elevation of 12 feet).

Construction

The Project would be constructed and operated in a manner that would maintain water quality compliance with all regulatory requirements and would be consistent with the site cleanup requirements. The SWPPP required under the construction general permit would also contain management practices to reduce the risk of release of pollutants on site and into the surrounding area during construction.

Operation

As discussed in item a), the runoff routed to the Eastern Drainage Channel would not contain pollutants, based on the cleanup actions and the proposed use of the site once cleanup is complete. Further, implementation of LID components pursuant to compliance with the MRP, or other requirements for stormwater control specified by the RWQCB, would reduce the likelihood that any pollutants in stormwater from the Project site reach the Eastern Drainage Channel during operations. The Project would result in less-than-significant impacts related to release of pollutants due to Project inundation.

Impacts related to this criterion from Project construction and operation would remain the same as those identified in the previously approved Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.*

The Plant Master Plan EIR evaluated whether the Plant Master Plan would substantially degrade water quality, but did not explicitly evaluate whether the Plant Master Plan would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Construction and Operation

The Project, through the site cleanup requirements issued by the RWQCB, is mandated to maintain compliance with regional water quality objectives, as described in the Basin

Plan.[46] As the site cleanup requirements are developed based on the region's water quality objectives, and compliance would continue through maintenance of the consolidation area cap, there would be no conflict. Adherence to the regulatory terms of the Construction General Permit and implementation of the best management practices in the Project-specific SWPPP would reduce the risk of water quality violations attributable to the Project's construction activity. Therefore, impacts related to the degradation of receiving waters due to Project operations pollutants would not be more significant than those identified in the previously approved Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

As described in criterion b), construction and operation of the Project would not require the use of groundwater resources. In addition, the Project would be implemented in a manner that would not affect recharge or groundwater contamination. Thus, the Project would not conflict with the objectives of the Santa Clara Valley Groundwater Sustainability Plan, and the impact would be less than significant. Therefore, impacts related to sustainable groundwater management due to Project construction and operations would not be more significant than those identified in the previously approved Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

References

California Emergency Management Agency, Tsunami Inundation Map for Emergency Planning, San Francisco Bay Area, December 9, 2009.

City of San José, 2013. San José/Santa Clara Regional Water Pollution Control Master Plan Environmental Impact Report; State Clearinghouse No. 2011052074; City of San José File Number PP11-403. November 19, 2013.

San Francisco Bay Regional Water Quality Control Board, Basin Plan, available at https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/planningtmdls/basinplan/web/bp_ch3.html. Accessed April 16, 2019.

San José-Santa Clara Regional Wastewater Facility, 2016. CIP Program RWF Flood Protection Study Final Flood Protection Guidelines for Future RWF Projects – Task 4.2, April 5, 2016.

Santa Clara Valley Water District, 2016. 2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins (GWMP), November 22, 2016.

[46] The San Francisco Bay Water Quality Control Plan (Basin Plan)

3.9 Noise

3.9.1 Setting

Environmental Setting

The environmental and regulatory settings relevant to noise and vibration have not appreciably changed since the certification of the Plant Master Plan EIR. Sensitive receptors, as identified in the adopted Plant Master Plan EIR, have not changed and remain applicable to the Project. There are no existing sensitive receptors (e.g., residences, schools) adjacent to or in the immediate vicinity of the Project area, and no hospitals, daycare centers, or long-term care facilities within one mile of the Project area.[47] The closest sensitive uses are residences located approximately 4,500 feet (0.85 miles) southwest of the Project site in the community of Alviso and further away at 6,600 feet (1.25 miles) to the east and to the south. The closest school is the George Mayne Elementary School located approximately 7,000 feet (1.3 miles) to the southwest.

Regulatory Setting

As discussed in the Plant Master Plan EIR, the Envision San José General Plan and the City of San José Municipal Code regulate construction and operational noise in the Project area and in the City of San José. The regulatory setting for noise in the Plant Master Plan area is described in Plant Master Plan EIR Section 4.4.2. Elements of the regulatory setting for noise identified in the Plant Master Plan EIR have not notably changed since 2013 and are incorporated by reference in the impact analysis in Section 3.8.2 of this document.

3.9.2 Findings of Previously Certified EIR

The certified Plant Master Plan EIR discussed impacts of construction and operations of the Plant Master Plan, including projects to be constructed in areas adjacent to the Project. The Plant Master Plan EIR identified the following impacts related to noise:

- No impacts associated with being located within an airport land use plan area or an area within two miles of a public airport or public use airport or private airstrip, or exposure of people residing or working in the area to excessive noise levels.
- Less-than-significant impacts from implementation of the Facility improvements associated with: temporary increase in noise and vibration exposure in the Project vicinity from Project-related demolition and construction; long-term traffic noise exposure in the Project vicinity from Project-related traffic; and increases in noise exposure to the surrounding existing environment from operations associated with Project improvements. The certified Plant Master Plan EIR also identified less-than-significant impacts associated with exposure of future proposed uses south and east of the Facility operational area to unacceptable traffic noise levels from existing traffic.

[47] For purposes of evaluation, implementation of Phase 2 of the Project is assumed to occur before completion of levee construction. Consequently, construction noise from implementation of Phase 2 actions would not affect future recreationists using the levee-top trail planned as part of the South Bay Shoreline Project.

- Potentially significant, but mitigable to less than significant, impacts to land uses south of the Regional Wastewater Facility operational area associated with temporary increase in noise exposure from Project-related demolition and construction and permanent increases in noise exposure from operations associated with Project improvements.

Issues	*New Potentially Significant Impact*	*New Less Than Significant with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
XIII. NOISE — Would the project result in:					
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or 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?	☐	☐	☐	☒	☐

Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

The Plant Master Plan EIR concluded that noise generated by construction of Facility improvements would not exceed the established significance threshold or typical ambient noise exposure at neighboring uses due to the distance to nearest residential or commercial sensitive receptors (which were located 3,500 and 2,000 feet, respectively, from construction locations). The Project is located within the Plant Master Plan area and further away from the nearest residential receptors. Project construction activities would take place over a period of 30 months starting in July 2020. Proposed construction hours for the Project would be Monday through Saturday, 7:00 am to 4:00 pm. However, the selected contractor may be required to work on Sunday, or during extended hours. No nighttime work would be required for construction.

Construction activities would temporarily and intermittently increase noise levels in the vicinity of the Project site. The City considers noise from Project construction involving substantial noise generating activities using heavy machinery for more than 12 months (continuous) to be significant at residential uses within 500 feet and commercial uses within 200 feet of the construction[48]. Construction hour restrictions as established by the

[48] Refer to Policy EC-1.7 of Chapter 3, Environmental Leadership, in *Envision San José 2040 General Plan*, adopted November 1, 2011.

City of San José Municipal Code, limit construction activities to the hours of 7:00 AM to 7:00 PM, Monday through Friday, also apply when construction activities take place within 500 feet of residential uses (City of San José, 2019). In this case, there are no existing or proposed residential uses within 500 feet or commercial uses within 200 feet of Project construction. Therefore, construction noise exposure associated with Project construction activities would not be expected to exceed the City's established significance threshold or typical ambient noise exposure at neighboring uses. Existing noise-sensitive uses in the Project vicinity would not be significantly affected by Project construction-related noise.

For reasons stated above, the Project would not result in any new or more significant impacts beyond those identified in the Plant Master Plan EIR with regard to generating noise levels exceeding established standards. **Same Impact as Approved Project. (Less than Significant)**

Operation

The Plant Master Plan EIR concluded that operation of the Project, referred to as Improvement B1 in the EIR would not be expected to produce any significant noise. Post-closure monitoring of the consolidated area would include periodic and/or annual observations for cap maintenance, and inspection following significant rain events and/or earthquakes. Maintenance activities would include mowing and trimming between one and four times per year, depending on precipitation and would be completed by four staff over a two-week period. Noise generated by vehicle trips and use of equipment associated with these activities would be minimal and would take place at a distance of 4,500 feet from the nearest sensitive receptors. Therefore, operational noise impact of the Project would be less than significant, same as that identified in the Plant Master Plan EIR.

For reasons stated above, the Project would not result in any new or more significant impacts beyond those identified in the Plant Master Plan EIR with regard to generating noise levels exceeding established standards. **Same Impact as Approved Project. (Less than Significant)**

b) Generation of excessive groundborne vibration or groundborne noise levels?

Construction

The Plant Master Plan EIR concluded that vibration from construction of the Plant Master Plan would not produce significant vibration levels at acoustically sensitive uses due to the distance between the construction activities and the nearest sensitive uses. The Project is located further away from the sensitive receptors than analyzed in the Plant Master Plan EIR at a distance of 4,500 feet from the nearest sensitive receptors. Policy EC-2.3 of the City's General Plan limits vibration levels from construction and demolition activities to 0.20 inches per second (in/sec) Peak Particle Velocity (PPV) to minimize the potential for cosmetic damage at buildings with normal conventional construction (City of San José, 2018). Operation of construction equipment used for

earthmoving activities associated with the Project would generate the highest vibration, but these levels would be less than the 0.20 in/sec threshold even at 25 feet (Federal Transit Administration, 2018). Therefore, vibration levels at the nearest sensitive receptors 4,500 feet away would be imperceptible. This would be a less-than-significant impact, and thus the Project would not result in any new or more significant impacts beyond those identified in the Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

Post-closure monitoring of the consolidated area would include periodic and/or annual observations for cap maintenance, and inspection following significant rain events and/or earthquakes. Maintenance activities would include mowing and trimming between one and four times per year, depending on precipitation and would be completed by four staff over a two-week period. As discussed above, vibration levels at the nearest sensitive receptors 4,500 feet away would be imperceptible. Therefore, operational impact of the Project would be less than significant. **(Less than Significant)**

c) *For a project located within the vicinity of a private airstrip or 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?*

Construction and Operation

The Plant Master Plan EIR concluded that development associated with the Plant Master Plan would have no impact related to noise from airports or airstrips because the Plant Master Plan area is more than 2 miles from a public use airport or a private airstrip. The Project location within the Plant Master Plan area is farther away at over 4 miles from the San José International Airport and 5.3 miles from Moffett Field Airport. Further, the Project does not include uses that would be expose workers or receptors to noise from local aircraft operations. Therefore, the Project would not be affected by aircraft noise. There would be no impact, and thus no new or more significant impacts beyond those identified in the Plant Master Plan EIR are identified. **Same Impact as Approved Project. (Less than Significant)**

References

City of San José, 2018. *Envision San José 2040 General Plan*. Adopted November 1, 2011, Amended February 27, 2018.

City of San José, 2019, *Code of Ordinances Municipal Code* Section 20.50.300, available at https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT20ZO_CH20.50INZODI_PT5PEST_20.50.300PEST. Accessed April 23, 2019

Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Assessment*, September 2018.

3.10 Transportation

3.10.1 Setting

Environmental Setting

Setting information relevant to transportation for the Project remains the same as discussed in the certified Plant Master Plan EIR. Construction vehicles would access the construction equipment and staging area through the existing entrance/gate off Zanker Road, connecting to State Route (SR) 237. The setting discussions from the Plant Master Plan EIR for this resource area are therefore applicable to the entire Project area.

Access to the Project site from the regional roadway network is limited to Zanker Road. As reported in the Plant Master Plan EIR, Zanker Road serves an average daily traffic (ADT) volume of approximately 3,600 vehicles north of the State Route (SR) 237 ramps. The most likely intersections that could be affected by an increase in traffic trips would be the Zanker Road/ SR 237 Westbound Ramps and Zanker Road/SR 237 Eastbound Ramps intersections. Both of these intersections are part of the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP).[49] According to the VTA's 2016 Annual Monitoring and Conformance Report, these two intersections operate at level of service (LOS) B+ during the PM peak hours.[50] The acceptable service levels for these intersections is LOS E or better (Santa Clara Valley Transportation Authority, 2016).

In general, SR 237 is fairly congested during both peak traffic periods and has limited capacity to accommodate additional growth in traffic. Northbound I-880 is the peak commute direction during the morning, and southbound is the peak commute direction during the evening. I-880 has slightly more capacity to accommodate additional growth in traffic, though it does have constraints in the peak directions of travel. Data published by Caltrans indicate that the annual ADT on I-880 is about 180,000 vehicles south of SR 237 and 225,000 vehicles north of SR 237 (California Department of Transportation, 2017).[51] CMP guidelines require that freeway segments to which a proposed development is projected to add trips equal to or greater than one percent of the freeway segment's capacity must be evaluated.

[49] As the Congestion Management Agency (CMA) for Santa Clara County and through its Congestion Management Program (CMP), the Santa Clara Valley Transportation Authority (VTA) has a statutory role to work with its Member Agencies (the 15 cities and towns in Santa Clara County, as well as the County of Santa Clara) on issues related to land use and transportation. As part of this role, VTA is working with its Member Agencies on the transition from Level of Service (LOS) to Vehicle Miles Traveled (VMT), in accordance with Senate Bill 743.

[50] The operation of a local roadway network is commonly measured and described using a grading system called Level of Service (LOS). The LOS grading system qualitatively characterizes traffic conditions associated with varying levels of vehicle traffic, ranging from LOS A (indicating free-flow traffic conditions with little or no delay experienced by motorists) to LOS F (indicating congested conditions where traffic flows exceed design capacity and result in long delays). This LOS grading system applies to both roadway segments and intersections.

[51] Annual average daily traffic is the total volume of vehicle traffic of a road for a year, divided by 365 days.

Regulatory Setting

The regulatory setting for transportation in the Plant Master Plan area is described in Plant Master Plan EIR Section 4.3.2. Elements of the regulatory setting for transportation identified in the Plant Master Plan EIR have not notably changed since 2013 and are incorporated by reference in the impact analysis in Section 3.9.2 of this document.

3.10.2 Findings of Previously Certified EIR

- The certified Plant Master Plan EIR identified significant and unavoidable impacts to established measures of effectiveness for travel mode share and travel speeds in transit corridors specific to the economic development portion of the Plant Master Plan evaluated in the EIR.
- The Plant Master Plan EIR identified potentially significant, but mitigable to less-than-significant, impacts for effects to levels of service at the study intersections and freeways, reductions in roadway capacity, and emergency access.
- The Plant Master Plan EIR identified less than significant impacts for conflicts with applicable transportation plans, effects to levels of service at study intersections and freeways designated as Congestion Management Program (CMP) facilities, increases in traffic-related hazards, and conflicts with adopted policies, plans, and programs supporting alternative transportation.
- The Plant Master Plan EIR identified no impact related to air traffic patterns as the project would not introduce new air traffic or interfere with existing air traffic.

Issues	*New Potentially Significant Impact*	*New Less Than Significant Impact with Mitigation Incorporation*	*New Less Than Significant Impact*	*Same Impact as Approved Project*	*Less Impact than Approved Project*
IV. TRANSPORTATION — Would the project:					
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☐	☐	☒

Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction

As shown in Table 2-5 and Table 2-6 in Chapter 2.7, *Construction Schedule and Process*, Phase 2 of Project construction, which is scheduled to occur between May 2021 and December 2022, would generate the largest number of truck and construction worker trips. To provide a conservative analysis of potential construction impacts, Phase 2 was used as the basis of the analysis. Table 3.9-1 summarizes the maximum number of estimated daily construction workers and truck trips anticipated to travel to/from the project site by construction phase.

TABLE 3.9-1
CONSTRUCTION WORKER AND TRUCK TRIPS

Construction Quantity	Phase 1	Phase 2
Maximum Haul Truck Trips per Day	52	166
Maximum Construction Workers per Day	20	32

SOURCE: Appendix C.

During Phase 2, construction activities would generate a maximum of 83 round truck trips per day (166 one-way truck trips trips) during biosolids excavation/transfer and cap placement. During this same period, a maximum of 64 vehicle trips per day (32 round trips) would be generated by construction workers traveling to and from the Project site; construction workers are assumed to commute to/from the Project site during the peak traffic hours, while truck trips would occur throughout the day. In general, the majority (95 percent) of Project trips are assumed to access the site via SR 237 (at the Zanker Road interchange), with the remaining five percent of the trips accessing the site via Zanker Road south of SR 237.

Intersections

The Project would add a maximum of 64 one-way worker vehicle trips per day (i.e., 32 commute trips during each of the AM and PM peak hours) during construction. The 83 one-way truck trips per day would be spread over the nine-hour (7:00 a.m. to 4:00 p.m.) work day. During the AM or PM peak hours, Project construction would add approximately 41 trips total (i.e., construction workers and trucks), of which 39 would access the site via SR 237. Peak hour construction vehicle trips are summarized below in Table 3.9-2

TABLE 3.9-2
PHASE 2 PEAK HOUR CONSTRUCTION WORKER AND TRUCK TRIPS AND DISTRIBUTION

Vehicle Trip Type	AM Peak Hour	PM Peak Hour
Maximum Haul Truck Trips	9	9
Maximum Construction Worker Trips	32	32
Total	***41***	***41***
Total via SR 237/Zanker Road Interchange	*39*	*39*
Total via Zanker Road south of SR 237	*2*	*2*

SOURCE: ESA.

Under the Plant Master Plan EIR, it was determined that construction of the near-term plant improvements is anticipated to add a maximum of 160 new vehicle trips during both the AM and PM peak hours to the nearby roadways. It was determined that the addition of those trips would not substantially increase the critical delay or volume-to-capacity ratio at the two study intersections, and the intersections would continue to operate at acceptable service levels (LOS B at the time of Plant Master Plan certification). Since construction of the Project would add fewer peak hour vehicle trips (41) than the number evaluated under the Plant Master Plan EIR (160), the intersections would continue to operate at LOS B. Furthermore, traffic generated by Project construction is excluded from CMP conformance requirements.[52] Therefore, construction of the Project would not result in any new or more significant impacts as those identified in the previously approved Plant Master Plan EIR.

The Project site and its immediate environs are not directly served by transit, although a limited number of VTA bus routes operate in the area. The Great America Amtrak and Altamont Commuter Express station is located approximately two miles from the Project site, but there is no transit connectivity between the Project site and the station. Existing transit service does not serve the Project area directly, and the Project would not conflict with any planned transit facilities nor would the Project prohibit access to such facilities.

The Project site currently has very limited pedestrian access, and no sidewalks are provided within the Project site. The Project would not affect any existing or planned pedestrian facilities nor would the Project conflict with any plans or policies associated with such facilities and users of such facilities.

The Project would not directly or indirectly eliminate alternative transportation corridors or facilities, nor would the Project include changes in adopted policies, plans, or programs that support alternative transportation. As a result, the Project would not conflict with adopted policies, plans, and programs that support alternative transportation, and would not result in any new or more significant impacts as those identified in the

[52] Legislation that created the Santa Clara VTA CMP excludes certain types of traffic from a determination of conformance with CMP traffic LOS standards. Construction traffic is one of these exclusions; for this reason, traffic generated by construction from the Project would not conflict with the CMP and does not require LOS analysis.

previously approved Plant Master Plan EIR. **Less Impact than Approved Project. (Less than Significant)**

Freeways

The SR 237 and I-880 segments immediately adjacent to the Project site could be affected if there was an increase in vehicle trips. Under the Plant Master Plan EIR, it was determined that the near-term plant improvements are anticipated to add approximately one to 12 vehicles per hour per lane to the freeway segments, which results in adding less than one percent of capacity to any study freeway segments. As described above, the Project would add approximately 32 commute trips during each of the AM and PM peak hours, and no more than 14 truck trips per day. The Project would have no significant impact on study freeway segments because it would add less than one percent of capacity to any study freeway segments.

This impact would be the same as identified in the Plant Master Plan EIR (as described above in *Findings of Previously Certified EIR*), and the Project would not result in any new or more significant impacts during operation compared to those identified in the certified Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

Operation

Maintenance activities would include mowing and trimming between one and four times per year, depending on precipitation. Mowing is typically completed by four staff over a two-week period. No additional staff would be needed to maintain the consolidation area or the remaining lagoons. The operation and maintenance of the Project would fall within the current Facility procedures, and no additional staff would be required.

Under the Plant Master Plan EIR, it was determined that the near-term plant improvements would add 17 new vehicle trips during the AM peak period and 21 new vehicle trips during the PM peak period to the nearby roadways. It was determined that the addition of those trips would not substantially increase the critical delay or volume-to-capacity ratio at the two study intersections, and the intersections would continue to operate at acceptable service levels (LOS B). Operation of the Project would add up to eight daily vehicle trips (four inbound, four outbound) while maintenance activities described above are occurring. This is fewer trips than what was evaluated under the Plant Master Plan EIR, and therefore the intersections would continue to operate at acceptable service levels (LOS E or better).[53] Furthermore, traffic generated by Project construction is excluded from CMP conformance requirements.[54] Therefore, the Project would not result in any new or more significant

[53] The acceptable service levels for these intersections is LOS E or better (Santa Clara Valley Transportation Authority, 2017).

[54] Legislation that created the Santa Clara VTA CMP excludes certain types of traffic from a determination of conformance with CMP traffic LOS standards. Construction traffic is one of these exclusions; for this reason, traffic generated by construction from the Project would not conflict with the CMP and does not require LOS analysis.

impacts related to the circulation system as those identified in the previously approved Plant Master Plan EIR. **Same Impact than Approved Project. (Less than Significant)**

b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Construction and Operation

The Plant Master Plan EIR included an analysis of the potential changes (or burden) on city transportation systems in 2040 (the horizon year of the General Plan as well as the Plant Master Plan). The analysis was based on a projected transportation condition in the future year when the General Plan capacities for jobs and housing are fully developed. The analysis included an evaluation of the Plant Master Plan's impacts to vehicle miles traveled (VMT) per service population, vehicle hours traveled (VHT) per service population, travel mode share, and vehicle speeds in the transit corridors. The assessment of the Plant Master Plan's contribution to citywide VMT (i.e., the difference in citywide VMT between the General Plan 2040 No Project and General Plan 2040 Plus Project conditions) indicates that the Plant Master Plan would not result in any increase in citywide VMT; therefore, the Plant Master Plan would have a less than significant impact on citywide VMT under General Plan 2040 plus Project conditions.

Section 15064.3 of the CEQA Guidelines suggests that the analysis of VMT impacts applies mainly to land use and transportation projects. Furthermore, consistent with the City's VMT analysis guidance as stated in Council Policy 5-1 (City of San José, 2018):

> "*...subsequent discretionary approval(s) required for a project approved prior to the Effective Date may continue to be analyzed under the prior environmental clearance and existing City Council Policy 5-3 after the Effective Date, provided that there is no Substantial Change to the project, as defined in California Public Resources Code Section 21166 and CEQA Guidelines Sections 15162-15164."*

Since the Plant Master Plan EIR was approved prior to the Effective Date of Council Policy 5-1 (March 2018), and the Project evaluated in this Addendum does not represent a substantial change to the project evaluated in the Plant Master Plan EIR, the City has determined that an analysis of VMT pursuant to requirements of Section 15064.3 of the CEQA Guidelines is not required for the Project. As such, the analysis is focused on the vehicle delay/LOS performance measure, which is the same performance measure used to evaluate transportation impacts in the Plant Master Plan EIR and is consistent with the City's guidance prior to implementation of Policy 5-1.

The impact would be the same as identified in the Plant Master Plan EIR (as described in Section 3.17.2), and the Project would not result in any new or more significant impacts during construction and operation compared to those identified in the certified Plant Master Plan EIR. **Less Impact than Approved Project. (No Impact)**

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

Construction and Operation

The Plant Master Plan EIR concluded that the operational area improvements would not alter roadway geometries or provide new roadway design features that would result in traffic safety hazards for vehicles, bicyclists, and pedestrians along nearby roadways. As discussed above, there is no existing transit service to the Project site, and there is limited bicycle and pedestrian activity in the vicinity of the Project site. Additionally, there are no sidewalks within the Project site vicinity, and there are no existing bicycle facilities that would be adversely affected by any Project-generated traffic. Overall, the Project would not alter roadway geometries or provide new roadway design features that would result in traffic safety hazards for vehicles, bicyclists, and pedestrians along nearby roadways. Based on these findings, the Project would not result in any new or more significant impacts to traffic safety hazards than those identified in the previously approved Plant Master Plan EIR. **Same Impact as Approved Project. (Less than Significant)**

d) *Result in inadequate emergency access?*

Construction and Operation

The Plant Master Plan EIR concluded that Facility improvements that result in the relocation of the main access location for existing operations, or that include installation of pipelines within and across Zanker Road and require lane closure during construction, would have potentially significant impacts on emergency access during Plant Master Plan construction. Access to the Project would be maintained to the site for both emergency and general (public) vehicles during construction, and the Project would not relocate operations access or require closure of Zanker Road. Based on these findings, the Project would not result in any new or more significant impacts to emergency access than those identified in the previously approved Plant Master Plan EIR. **Less Impact than Approved Project. (Less than Significant)**

References

California Department of Transportation (Caltrans). *2017 Traffic Volumes on California State Highways*, available at http://dot.ca.gov/trafficops/census/; accessed December 17, 2019.

Santa Clara Valley Transportation Authority, 2016. *2016 CMP Monitoring and Conformance Report*, available at: http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/Final%20MC%20Report%202016.pdf. accessed December 17, 2019.

CHAPTER 4
Authors and Consultants

4.1 Lead Agency

City of San José
Department of Planning, Building, and Code Enforcement

David Keyon, Principal Planner
Cassandra van der Zweep, Planner IV
Kenneth Rosales, Planner II

City of San José
Department of Environmental Services

Jennifer Voccola-Brown, Sustainability and Compliance Manager
Cathy Correia, Interim Environmental Compliance Officer
Jessica Donald, Environmental Services Specialist

4.2 Consultants

Environmental Science Associates (ESA)

Jill Hamilton, Project Director
Karen Lancelle and Meryka Dirks, Project Managers
John Bourgeois, Biology Lead
Erika Walther, Biological Resources Analyst
Heidi Koenig, Cultural Lead
Jyothi Iyer, Air Quality, Greenhouse Gas, and Noise Lead
Karen Lancelle, Geology, Hydrology and Hazards Lead
Shadde Rosenblum, Transportation Lead

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