CITY OF FRESNO NORTHEAST SURFACE WATER TREATMENT FACILITY STORAGE TANK PROJECT

Final Initial Study/Supplemental Mitigated Negative Declaration
SCH #2017041061

Prepared for
City of Fresno

July 2017

ESA

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ENVIRONMENTAL CHECKLIST

Initial Study

1. **Project Title:** City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

2. **Lead Agency Name and Address:** City of Fresno, DPU, Water Division
Program Management Office
2101 G Street, Fresno, CA 93706

3. **Contact Person and Phone Number:** Douglas Hahn, (559) 621-1607

4. **Project Location:** City of Fresno, CA

5. **Project Sponsor's Name and Address:** Michael Carbajal, Manager
City of Fresno, DPU, Water Division
Program Management Office
2101 G Street, Fresno, CA 93706

6. **General Plan Designation(s):** Water Recharge Basin

7. **Zoning Designation(s):** Public and Institutional

8. **Description of Proposed Project:** See Section 1.4 Proposed Project.

9. **Surrounding Land Uses and Setting:** See Section 1.4 Proposed Project.

10. **Other public agencies whose approval is required.** See Table 1-1

Environmental Factors Potentially Affected

The proposed Project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Michael Carbajal
Signature

7/10/17
Date

Michael Carbajal
Printed Name

For

CHAPTER 1
Project Description

1.1 Introduction and Background

The City of Fresno's (City) existing 30 million gallons per day (mgd) Northeast Surface Water Treatment Facility (NESWTF) has an existing 1.5 million gallon (MG) water storage tank for holding treated water to be pumped into the water distribution system. The size of the existing tank is not sufficient to maximize the use of the NESWTF and reduce the need for groundwater under high demand conditions. In order to meet the water quality requirements, customer demands, and reduce the use of groundwater, the City proposes to install a new 6 MG tank to provide a total of 7.5 MG of storage capacity at the NESWTF.

1.1.1 City of Fresno Metropolitan Water Resources Management Plan Update

The City prepared the Metropolitan Water Resources Management Plan Update Environmental Impact Report (EIR), which was adopted in June 2014. An addendum was adopted in August 2016. The purpose of the Metro Plan Update was to update the 1996 Fresno Metropolitan Water Resources Management Plan (1996 Metro Plan) taking into consideration available new data and accommodating physical and institutional changes which have occurred since the 1996 Metro Plan was prepared. The completed Metro Plan Update facilitates future water resource decisions and utility planning, and assists in the pursuit of potential funding opportunities. Implementation of the City's recommended water supply plan will result in a more optimized and efficient conjunctive use of the City's available water resources, which will enhance the City's overall water supply reliability. The Metro Plan Update includes near-term and future project elements including surface water treatment facilities, regional transmission facilities, groundwater facilities, potable water storage facilities, recycled water facilities, and water conservation measures.

1.1.2 CEQA Process

This document has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before they approve or implement those projects.

The Initial Study (IS) is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. In the case of the proposed

Project, the City is the lead agency and will use the IS to determine whether the proposed Project has a significant effect on the environment.

If the lead agency finds substantial evidence that any aspect of the proposed Project, either alone or in combination with other projects, may have a significant effect on the environment, that agency is required to prepare an Environmental Impact Report (EIR), a supplement to a previously prepared EIR, or a subsequent EIR to analyze the proposed Project at hand. If the agency finds no substantial evidence that the proposed Project or any of its aspects may cause a significant impact on the environment, a negative declaration may be prepared. If, over the course of the analysis, the proposed Project is found to have a significant impact on the environment that, with specific mitigation measures, can be reduced to a less-than-significant level, a supplemental mitigated negative declaration may be prepared. This IS has been prepared to evaluate the potential environmental effects of the proposed Project. All significant or potentially significant impacts on the environment would be reduced to less-than-significant levels with incorporation of specific mitigation measures. Therefore, a supplemental mitigated negative declaration (MND) has been prepared.

1.1.3 CEQA Tiering

Tiering under CEQA refers to using the analyses of impacts contained in a broader EIR, such as the Metro Plan Update EIR (State Clearinghouse Number [SCH] #2013091021), to streamline the analysis of subsequent, related projects through a tiered EIR or a tiered negative declaration (CEQA Guidelines Section 15152). The proposed Project was initially evaluated under the Metro Plan Update EIR at a program level.

Consistent with CEQA guidelines on preparation and use of a program EIR (CEQA Guidelines Section 15168), the EIR assessed and documented the broad environmental impacts of the Metro Plan Update. Implementation of specific future project elements are examined in the light of the EIR to determine whether additional subsequent environmental review is required (CEQA Guidelines Section 15168). Subsequent environmental review documents may be "tiered" from the EIR, pursuant to CEQA Guidelines Sections 15152 and 15168. "Tiering" refers to the use of analysis from a broader EIR with subsequent environmental review concentrating on environmental issues specific to the future project elements that were not fully evaluated in the EIR.

This supplemental MND builds on the general analysis contained in the Metro Plan Update EIR, and presents a project-specific CEQA analysis for the proposed Project. Consistent with CEQA Guidelines Section 15150, the Metro Plan Update EIR, as amended in August 2016, is incorporated by reference[1] into this IS/MND, including applicable environmental setting, impact analysis, and mitigation measures.

[1] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm

1.2 Project Location

The proposed Project would be located in the northeast service area of the City and its sphere of influence (SOI) (**Figure 1-1**). Proposed Project regional facilities would be sited at the existing NESWTF, located at 10120 North Chestnut Avenue in northeast Fresno. **Figure 1-2** provides additional detail about the location of the proposed Project.

1.3 Project Objectives

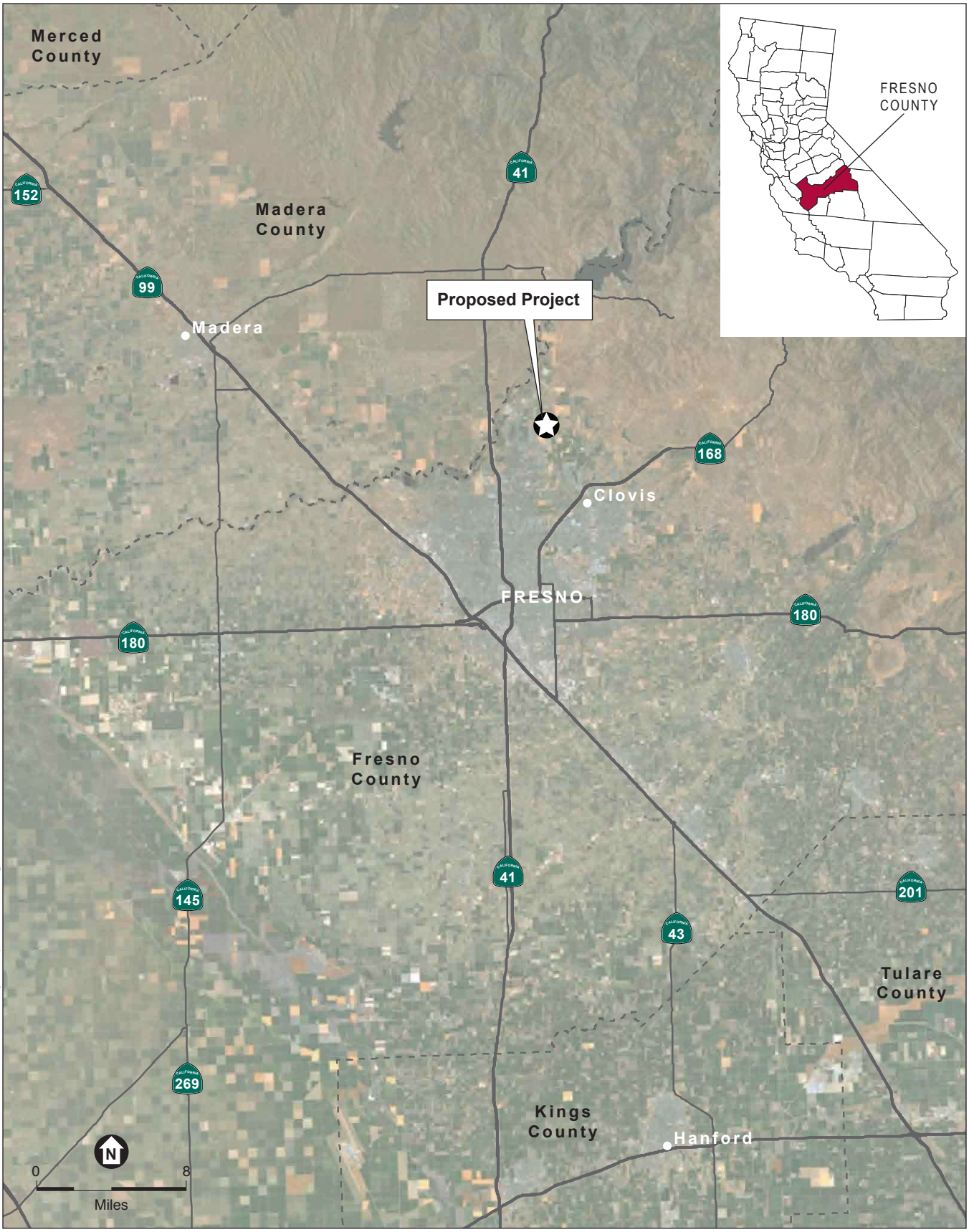
The overall objective of the proposed Project is to support implementation of the Metro Plan Update. The objectives of the Metro Plan Update include the planning development of a distribution system that would:

- Optimize the conjunctive use of the City's available surface water, groundwater, and recycled water supplies for direct treatment and use, and intentional groundwater recharge;
- Balance the City's groundwater operations by 2025;
- Replenish groundwater basin storage;
- Continue to implement and expand demand management/water conservation measures in compliance with the City's U.S. Bureau of Reclamation (USBR) contract and to achieve specific water conservation goals; and
- Utilize recycled water to meet in-City non-potable demands in new development areas and existing parts of the City.

1.4 Proposed Project

In order to meet the water quality requirements, customer demands, and reduce the use of groundwater, the City proposes to install a new 6 MG water storage tank to provide a total of 7.5 MG of storage capacity at the NESWTF. The new 6 MG tank will be located on the south side of the NESWTF, where the overflow spill pond is currently located (shown on Figure 1-2). The circular tank will be approximately 230-feet in diameter and be approximately 24-feet in height. The existing over flow/spill pond will be reconfigured to allow space for the new tank. The tank will be a pre-stressed concrete structure that is buried approximately 20 feet below ground with only the top four feet exposed above ground level. Construction of the tank will require excavation to a depth of approximately 23 feet to install the foundation. Piping inlet and outlets will be installed on the bottom of the tank, requiring some limited excavations as deep as 30 feet to place these pipes.

The new tank will operate much like the existing tank, and will be configured in a similar manner. Filtered water will be fed to both tanks through a system of pipes and valves, and water from both tanks will be distributed to customers from the existing high service pump station. Hydraulic modeling will be conducted prior to construction to determine if the pumps need to be modified to accommodate the new tank. Valve and pump controls will be modified as required to accommodate the new tank.



SOURCE: Microsoft, 2010; ESRI, 2012, Blair, Church and Flynn, 2013; ESA, 2017

City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

Figure 1-1
Regional Location

ESA

D:\208754.02 - Northeast Surface Water Treatment Facility\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Department of Public Utilities, 2017; Google Earth, 2017

City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

Figure 1-2
Project Area

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Construction activities will include the following:

- Dewatering of the existing overflow pond;
- Excavation and grading required for the new 6 MG tank and the piping connections, and to reconfigure the overflow pond;
- Removal of portions of an orange grove along the south end of the property to accommodate the new tank and reconfigured overflow pond;
- Construction and installation of the new 6 MG tank, piping for filtered water into the new tank, piping from the new tank to the existing pump station, and a new pipeline from the existing distribution system to the new tank;
- Replacement and/or modification of existing pump(s) in the pump station as necessary;
- Modification to electrical systems, instrumentation, and controls as necessary;
- Expanding the existing facility perimeter fence, moving it roughly 220 feet further south to fully incorporate the new facilities;

1.5 Construction Process and Schedule

Site Preparation

The new facilities will encroach on an existing, disused citrus grove, which will require removal of approximately 2 acres of these trees. The affected area of the grove is currently not within the existing facility fence line, but will be incorporated into the facility perimeter at the beginning of construction.

Construction

The proposed improvements to the NESWTF would all be located within the existing NESWTF site boundary. The current fence line does not include the citrus grove, and therefore will be expanded and moved further south and west, to fully encompass the site. Construction vehicles and equipment would park on-site and all construction staging would occur within the facility boundary (shown on Figure 1-2). Construction activities would be limited to those portions of the existing facility affected by the proposed Project. The construction sequence activities that are expected to occur include: clearing and grubbing of the site; tank excavation and other site earthwork; installation of electrical components, process mechanical, and instrumentation; paving; and architectural finish and landscaping.

Excavation

The new tank will be approximately 230 feet in diameter and represent the single largest facility added to the site. An existing onsite tank overflow pond will be expanded to final rectangular dimensions of roughly 300-feet by 200-feet, with a maximum excavation cut of approximately 20 feet, and a maximum final water depth of roughly 16 feet. There will be a net material cut of about 30,000 cubic yards of excess material that will be hauled offsite.

Staging Area

A staging area for Contractor use has been identified on the east side of the new facilities, adjacent to the new tank. The staging area will be roughly 240-feet by 240-feet in dimension (1.3 acres). Ingress to the site will be by Behymer Avenue to the south, and egress will be from Chestnut Street on the west.

Site Restoration

Site restoration activities following construction will consist primarily of landscaping and gravel surfaces.

Construction Equipment and Workers

The primary types of heavy equipment to be used during construction include an excavator, a crane, a motor grader, a scraper, a bulldozer, and a front-end loader. Smaller pieces of miscellaneous equipment for intermittent use could include a rolling compactor, a forklift, and a water truck. A maximum of five dump trucks will be used intermittently to haul material offsite, as well as bring material such as gravel to the site. Tank construction will require a maximum of four concrete mixers to bring concrete to the site.

The prime contractor will schedule the number of crews and crew members appropriate for the construction schedule. The maximum number of workers on site is not expected to exceed 30.

Operation

Recognizing that the proposed Project is intended to increase the operating capacity of the existing facility, operation of the proposed Project would represent very little change from the existing plant's current operation. The new tank would be used for increased water storage capacity, and will not have any new, major equipment associated with it. The proposed Project does include modifications to existing finished water pumps, but this operational condition does not represent any change from the current operations.

Anticipated Construction Schedule

In total, proposed Project construction would require approximately 11 months to complete, and construction is anticipated to start in August 2017.

1.6 Responsible Agencies, Permits, and Approvals

Table 1-1 summarizes the potential permits and/or approvals that may be required prior to construction of the proposed Project.

TABLE 1-1
REGULATORY REQUIREMENTS, PERMITS, AND AUTHORIZATIONS FOR PROJECT FACILITIES

Agency	Type of Approval
State and Federal Agencies	
Central Valley Regional Water Quality Control Board (CVRWQCB)	Section 401 Water Quality Certification; National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharge Associated with Construction
Cal Occupational Safety and Health Administration (OSHA)	Construction or Excavation Permit
State Office of Historic Preservation	Section 106 of National Historic Preservation Act review
United States Fish and Wildlife Service (USFWS)	ESA Section 7 review and concurrence

CHAPTER 2
Environmental Checklist

The following environmental checklist is based on Appendix G of the CEQA Guidelines. Each environmental issue includes a discussion of the following: background, where in the Metro Plan Update EIR the environmental issue is discussed; summary of existing conditions as relevant; applicable Metro Plan Update EIR impacts and mitigation measures; and discussion of environmental checklist items, including findings for proposed Project effects that correspond to the following categories of environmental impacts:

- **Potentially Significant Impact:** An effect that may be considered significant under CEQA; potentially significant impacts identified would require completion of an EIR. No potentially significant impacts were identified in the impact analysis.

- **Less than Significant with Mitigation Incorporated:** An effect that was not adequately addressed in the Metro Plan Update EIR, but with the implementation of Project-specific mitigation measures, is reduced from potentially significant to less than significant.

- **Less-than-Significant Impact:** An effect for which there are no significant impacts; only less-than-significant impacts result.

- **No Impact:** The proposed Project has no effect on the environment.

- **Impact Addressed in Metro Plan Update EIR:** An effect that was adequately addressed and mitigated to the extent feasible in the Metro Plan Update EIR. For these effects, an explanation is provided as to how the effect was addressed in the Metro Plan Update EIR and why the criteria for supplemental environmental review under PRC Section 21166 (project changes, changed circumstances, and/or new information) have not been triggered. Effects correspond to this category under the following condition: The Metro Plan Update EIR found that the impact would be reduced to a less-than-significant level with the implementation of applicable Metro Plan Update EIR mitigation measures.

2.1 Aesthetics

Section 4.11 of the Metro Plan Update EIR addresses the aesthetic effects of implementing the Metro Plan, including the proposed Project. The following discussion provides Project-specific information relevant to aesthetics.

Environmental Setting

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character

and quality of the environment, visual or aesthetic impacts may occur. This analysis of potential visual effects is based on review of a variety of data, including proposed Project maps and drawings, a visual survey of the project area, aerial and ground level photographs of the Project area, and planning documents. The proposed Project would be located on the south side of the treatment facility, where the overflow spill pond is currently located. This facility is adjacent to residential neighborhoods and open space areas. Construction of the proposed Project would be partially screened from nearby residences.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to aesthetics to be significant if the Metro Plan Update would:

- Have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway;
- Substantially degrade the existing visual character or quality of the Metro Plan area and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/Supplemental Mitigated Negative Declaration (IS/SMND) are presented in **Appendix A**.

Aesthetics		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.11.1	Implementation of the proposed project could adversely impact scenic vistas or scenic resources within a state scenic highway.	LS	N/A
4.11.2	Implementation of the proposed project could degrade the existing visual character or quality of the project area.	S	LS
4.11.3	Operation of project related facilities would introduce new sources of light and increase ambient light in the project area.	S	LS
4.11.4	Implementation of the proposed project could make a cumulatively considerable contribution to adverse effects on the visual/aesthetic resources of local viewsheds in the project area.	S	LS

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
1. AESTHETICS — Would the Project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐	☐

a) **No Impact.** The proposed Project is not located in or near any designated scenic vistas and therefore would not have an impact on any scenic vista. There would be no impact.

b) **No Impact.** A review of the current California Department of Transportation (Caltrans) Map of Designated State Scenic Highways indicated that there are no officially designated state scenic highways in Fresno County (Caltrans, 2017). The proposed Project is not located near or along a state scenic highway, and therefore would not damage associated scenic resources including, but not limited to trees, outcroppings, and historic buildings within a scenic highway. There would be no impact.

c) **Less than Significant.** The proposed Project would entail the construction and installation of the new water storage tank, reconfiguration of the overflow pond, and associated improvements of the NESWTF. Construction activities would require the use of heavy equipment, excavation and grading, and storage of materials on-site which could result in temporary changes to the visual character of the surrounding areas. Views of the facility from public roads are partially screened due to safety fencing and surrounding landscaping. The expansion of this facility would not be anticipated to result in a significant change to the visual character of surrounding area because the new water storage tank, reconfiguration of the overflow pond, and associated improvements of the NESWTF would be consistent with the existing visual character of the NESWTF. As a result, this impact would be less than significant.

d) **Less than Significant.** The construction of the proposed water storage tank, reconfiguration of the overflow pond, and associated improvements of the NESWTF would not result in any new sources of light or glare, because construction would occur during the daytime and would not require nighttime lighting. The operation of the proposed Project would not result in a substantial new source of light and glare because lighting in the area would be similar to and consistent with the lighting at the existing facilities of the NESWTF. As a result, this impact would be less than significant.

References

California Department of Transportation (Caltrans), 2017. California Scenic Highway Program. Available: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed March 16, 2017.

City of Fresno, 2014. Fresno General Plan. Prepared by City of Fresno Development and Resource Management Department. December 18, 2014.

2.2 Agricultural and Forestry Resources

Section 4.2 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on agricultural resources. The following discussion provides Project-specific information relevant to agricultural and forestry resources.

Environmental Setting

The NESWTF is located within the City of Fresno. Adjacent land uses include residential neighborhoods, and other open space areas. The NESWTF has an unmaintained citrus grove onsite, adjacent and south of the operating facility. The total area of the grove that would be removed as part of the proposed Project is listed under Farmland Mapping and Monitoring Program (FMMP) as Farmland of Statewide Importance (CA DOC, 2017).

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to agricultural resources to be significant if the Metro Plan Update would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use or a Williamson Act; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural uses.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance. No mitigation measures for agriculture and forestry resources were applied in the Metro Plan Update EIR.

Land Use and Agricultural Resources		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.2-2	Implementation of the proposed project could result in the permanent conversion of land designated by the Department of Conservation FMMP as Prime Farmland, Farmland of Statewide Importance or Unique Farmland.	LS	N/A
4.2-3	Implementation of the proposed project could result in conflicts with existing zoning for agricultural use or a Williamson Act contract.	LS	N/A
4.2-4	Implementation of the proposed project, in combination of other development, could result in the permanent conversion of Prime Farmland, Farmland of Statewide Importance or Unique Farmland.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update*
2. AGRICULTURE AND FORESTRY RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	☐

a) **Less than Significant.** The proposed Project would require the removal of approximately 2 acres of the existing citrus grove at the NESWTF. The portion of land where the proposed Project would remove trees is listed as Farmland of Statewide Importance. According to the 2015 Farmland Conversion Report, Fresno County had 411,483 acres of Farmland of Statewide Importance (CA DOC, 2015). The loss of 2 acres would represent a decrease of 0.000486 percent of Farmland of Statewide Importance in the County. In addition, the grove is within the existing NESWTF site boundary and is currently unmaintained. As a result, this impact would be less than significant.

b) **No Impact.** The proposed Project would not conflict with the existing zoning for the Project site and would not convert farmland to a non-agricultural use. There would be no impact.

c, d, e) **No Impact.** The proposed Project would be located within the existing NESWTF and would therefore not be located in an area zoned as forest, timberland or used for timber

production. The proposed Project would not convert forest land to a non-forest use. There would be no impact.

References

California Department of Conservation, 2015. California Farmland Conversion Report. Available: http://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp/pubs/2010-2012/FCR/FCR%202015_complete.pdf. Accessed March 21, 2017.

California Department of Conservation, 2017. California Important Farmland Finder. Available: http://maps.conservation.ca.gov/ciff/ciff.html. Accessed March 21, 2017.

2.3 Air Quality

Section 4.7 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on air quality. The following discussion provides Project-specific information relevant to air quality.

Environmental Setting

The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by pollutant sources and the atmosphere's ability to transport, transform, and dilute such emissions. Natural factors that affect pollutant transport and fate (process by which chemicals move and are transformed in the environment) include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the Project area are determined by such natural factors as topography, meteorology, and climate, in addition to the types and quantities of emissions released by existing air pollutant sources.

The following is a brief discussion regarding the setting of the proposed Project. The Metro Plan Update EIR contains greater detail regarding existing conditions, criteria air pollutants, non-criteria air pollutants, and applicable regulations. The Metro Plan Update EIR is incorporated by reference.[2]

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the local agency charged with administering local, state, and federal air quality management programs for Merced, San Joaquin, Stanislaus, Madera, Fresno, Kings, and Tulare counties, and the valley portion of Kern County. The District has jurisdiction over most stationary source air quality matters in the San Joaquin Valley Air Basin (SJVAB). The SJVAPCD is responsible for developing SJVAB attainment plans for inclusion in California's State Implementation Plan (SIP), as well as establishing and enforcing air pollution control rules and regulations.

As shown in **Table 2.3-1**, the SJVAB is classified as non-attainment for ozone (O_3; state and federal), PM_{10} (particulate matter 10 micrometers or less in diameter; state), and $PM_{2.5}$ (particulate matter 2.5 micrometers or less in diameter; state and federal). Federal and state air quality laws require regions designated as nonattainment to prepare plans that either demonstrate how the region will attain the standard or reasonably improve air quality conditions.

[2] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm

TABLE 2.3-1
SAN JOAQUIN VALLEY ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – one hour	No Federal Standard[1]	Nonattainment/Severe
Ozone – eight hour	Nonattainment/Extreme[2]	Nonattainment
PM_{10}	Attainment[3]	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead	No Designation / Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Vinyl Chloride	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified

NOTES:

1 Federal One Hour Ozone National Ambient Air Quality Standard was revoked on June 15, 2005

2 Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

3 On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM_{10} National Ambient Air Quality Standard (NNQS) and approved the PM_{10} Maintenance Plan.

SOURCE: SJVAPCD, 2017

The SJVAPCD's primary means of implementing the above air quality plans is by adopting and enforcing rules and regulations. Stationary sources within the jurisdiction are regulated by the District's permit authority over such sources, such as Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review Rule), and through its review and planning activities. Additional District Rules that may apply to the proposed Project include:

- ***District Rule 2280 (Portable Equipment Registration).*** All portable emission units (including portable drilling rigs) are required to register with the SJVAPCD or the California Air Resources Board (CARB). Should this project require the installation of an air stripping operation, and/or an auxiliary diesel or natural gas engine greater than fifty brake horsepower, application for an Authority to Construct may be required.

- ***District Rule 3135 (Dust Control Plan Fee).*** This rule requires the applicant to submit a fee in addition to a Dust Control Plan. The purpose of this fee is to recover the SJVAPCD's cost for reviewing these plans and conducting compliance inspections.

- ***District Rule 4102 (Nuisance).*** This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the project creates a public nuisance, it could be in violation and be subject to SJVAPCD enforcement action.

- ***District Rule 4103 (Open Burning).*** This rule regulates the use of open burning and specifies the types of materials that may be burned. Agricultural material shall not be burned when the land use is converting from agriculture to non-agricultural purposes (e.g., commercial, industrial, institutional, or residential uses). Section 5.1 of this rule prohibits the burning of trees and other vegetative (non-agricultural) material whenever the land is being developed for non-agricultural purposes. In the event that the project applicant burned or burns agricultural material, it would be in violation of Rule 4103 and be subject to SJVAPCD enforcement action.

- ***District Regulation VIII (Fugitive PM10 Prohibitions).*** Regulation VIII (Rules 8011-8081) is a series of rules designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction, road construction, bulk materials storage, landfill operations, etc. The Dust Control Plan threshold has changed from 40.0 acres to 5.0 or more acres for non-residential sites. If a non-residential site is 1.0 to less than 5.0 acres, an owner/ operator must provide written notification to the SJVAPCD at least 48 hours prior to his/her intent to begin any earthmoving activities. If a residential site is 1.0 to less than 10.0 acres, an owner/operator must provide written notification to the SJVAPCD at least 48 hours prior to his/her intent to begin any earthmoving activities.

  Regulation VIII specifically addresses the following activities:

  – Rule 8011: General Requirements;
  – Rule 8021: Construction, Demolition, Excavation, Extraction and other Earthmoving Activities;
  – Rule 8031: Bulk Materials;
  – Rule 8041: Carryout and Trackout;
  – Rule 8051: Open Areas;
  – Rule 8061: Paved and Unpaved Roads; and
  – Rule 8071: Unpaved Vehicle/Equipment Traffic Areas.

- ***District Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).*** Paving operations on this project will be subject to Rule 4841. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt, and emulsified asphalt for paving and maintenance operations.

Also, in addition to these above-described rules, District Rule 9510 Indirect Source Review (ISR) was adopted December 15, 2005. ISR was adopted to fulfill the SJVAPCD's emission reduction commitments in the PM_{10} and Ozone Attainment Plans. ISR requires submittal of an Air Impact Assessment (AIA) application no later than applying for a final discretionary approval with the public agency. The AIA contains information necessary to calculate both construction and operational emissions of a development project. Construction of the proposed Project would qualify as a development project under Rule 9510. Section 6.0 of the Rule outlines general mitigation requirements for developments that include reduction in construction emissions of 20 percent of the total construction NO_x emissions, and 45 percent of the total construction PM_{10} exhaust emissions. Section 6.0 of the Rule also requires the proposed Project to reduce operational NO_x emissions by 33.3 percent and operational PM_{10} emissions by 50 percent. Section 7.0 of the Rule includes fee schedules for construction or operational excess emissions of

NO_x or PM_{10}, those emissions above the goals identified in Section 6.0 of the Rule. Section 7.2 of the Rule identifies fees for excess emissions.

The SJVAPCD also limits emissions of, and public exposure to, toxic air contaminants through a number of programs. District Policies 1905 (Risk Management Policy for Permitting New and Modified Sources) and 1910 (Toxic Best Available Control Technology for New and Modified Diesel Internal Combustion Engines) provide guidelines on permitting sources that emit toxic air contaminants (also referred to interchangeably by the district as hazardous air pollutants).

The potential for new and modified stationary sources to emit toxic air contaminants is reviewed by the SJVAPCD's Permit Services Division, which implements the SJVAPCD's Risk Management Policy. The SJVAPCD's Regulation VII pertains specifically to toxic air contaminants. Toxic air contaminant emissions from stationary sources are limited by:

- SJVAPCD adoption and enforcement of rules aimed at specific types of sources known to emit toxic air contaminants;
- Implementation of the Air Toxics "Hot Spots" Program; and
- Implementation of the Federal Title III Toxics program.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to air quality to be significant if the Metro Plan Update would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any nonattainment pollutant (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Air Quality		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.7-1	Construction activities associated with development of the project would generate short-term emissions of criteria pollutants	S	SU
4.7-2	Operation of the project could generate criteria air pollutant emissions that could contribute to existing nonattainment conditions and degrade air quality.	LS	N/A
4.7-3	Construction and/or operation of the project could expose sensitive receptors to substantial pollutant concentrations.	LS	N/A
4.7-4	The project could create objectionable odors affecting a substantial number of people.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
3. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. **Would the Project:**					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or Projected air quality violation?	☐	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐		☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	☐

a) **Impact Addressed in Metro Plan Update EIR.** The applicable air quality plan is the *2016 Ozone Plan for 2008 8-hour Ozone Standard* (SJVAPCD 2016a) and *2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard* (SJVAPCD 2016b). The current SJVAPCD set of rules and regulations represents all feasible control measures for SJVAPCD sources. The SJVAPCD plans to achieve the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) by the earliest practicable date as a result of local reductions. Exceedance of the SJVAPCD's current adopted thresholds of significance for criteria pollutant emissions would conflict

with or obstruct the implementation of the *2016 Ozone Plan for 2008 8-hour Ozone Standard* and *2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard.* The plan includes a number of strategies to improve air quality including a transportation control strategy and a vehicle inspection program. In order to maintain consistency with the plan, implementation of Metro Plan Update EIR **Mitigation Measures 4.7-1a** to **4.7-1c** would be required. These mitigation measures would minimize potential construction related air emissions, and ensure that the proposed Project would be consistent with the *2016 Ozone Plan for 2008 8-hour Ozone Standard* and *2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard*. As a result, the proposed Project would not conflict with or obstruct with implementation of the Plan, and this impact would be reduced to less than significant.

b) **Less than Significant.** The Metro Plan Update EIR assessed air quality impacts using criteria pollutant significance thresholds provided in SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI; SJVAPCD, 2002), which identified annual emission thresholds for the ozone precursors: nitrogen oxides (NOx) and reactive organic gases (ROG). Since the publication of the Metro Plan Update EIR, there have been updates to the SJVAPCD's GAMAQI. In March 19, 2015, the SJVAPCD revised their GAMAQI to include significance thresholds for carbon monoxide (CO), sulphur oxides (Sox), PM_{10} and $PM_{2.5}$ (SJVAPCD, 2015). The SJVAPCD's current adopted thresholds of significance are presented in **Table 2.3-2**, which apply to both construction and operation activities.

TABLE 2.3-2
SUMMARY OF SJVAPCD SIGNIFICANCE THRESHOLDS

Pollutant/ Precursors	Construction Emissions	Operational Emissions	
		Permitted Equipment and Activities	Non-Permitted Equipment and Activities
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
NOx	10	10	10
ROG	10	10	10
SOx	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

Source: SJVAPCD, 2015

Construction of the proposed Project is anticipated to begin in early August 2017 and would be completed within 11 months. Construction activities would include the dewatering of the existing overflow pond, excavation and grading and installation of a new 6 MG tank. Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. Construction activities would also result in the emission of pollutants of concern (ROG, NOx, PM_{10}, and $PM_{2.5}$) from construction equipment exhaust and construction worker

automobile trips. Emission levels for construction activities would vary depending on the number and type of equipment, duration of use, operating schedules, and the number of construction workers.

Construction emissions were estimated for the proposed Project using the methods contained in SJVAPCD's latest guidance (SJVAPCD, 2015). The California Emissions Estimator Model (CalEEMod v2016.3.1) was used to quantify construction CO, NOx, ROG, SOx, PM_{10} and $PM_{2.5}$ annual emissions from off-road equipment, haul trucks, and on-road worker trips associated with roadway construction. Additional assumptions and information are included in **Appendix B**. The annual construction emissions are compared to SJVAPCD's significance thresholds, which are presented in **Table 2.3-3**.

TABLE 2.3-3
ANNUAL CONSTRUCTION EMISSIONS
(TONS PER YEAR)

Construction Year	CO (tpy)	NOx (tpy)	ROG (tpy)	SOx (tpy)	PM10 (tpy)	PM2.5 (tpy)
2017	1.1	2.8	0.2	<0.1	0.4	0.2
2018	1.0	2.2	0.2	<0.1	0.3	0.1
SJVAPCD Significance Thresholds	100	10	10	27	15	15
Significant Impact (Yes or No)?	No	No	No	No	No	No

NOTES:
1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix AQ for model outputs and more detailed assumptions.

SOURCE: ESA, 2017

As shown in Table 2.3-3, Project-related annual construction emissions would not exceed the SJVAPCD's significance thresholds for CO, NOx, ROG, SOx, PM_{10} or $PM_{2.5}$. In addition, the proposed Project would not result in an increase in long-term operational traffic, because the proposed Project would not add new workers for operations. Thus, the proposed Project is not expected to generate an increase in maintenance vehicle trips over existing conditions, and therefore would not generate net new emissions during operations, and any operation emissions associated with maintenance would be minimal. Therefore, project-related construction and operational annual emissions would not exceed any of the SJVAPCD's significance thresholds. As a result, this impact would be less than significant.

c) **Impact Addressed in Metro Plan Update EIR.** As discussed in Checklist Item b, the proposed Project is located within the SJVAPCD, which is designated as a non-attainment area for the state and federal standards of O_3 and $PM_{2.5}$, and for the state PM_{10} standard. Air emissions would be generated during construction of the proposed Project, which could increase criteria air pollutants, including NOx, O_3, PM_{10}, and $PM_{2.5}$. However, construction activities would be temporary and limited to the duration of construction, and implementation of Metro Plan Update EIR **Mitigation Measures**

4.7-1a to **4.7-1c** would reduce emissions of ozone precursors and particulate matter during construction, thereby reducing construction emissions to less-than-significant levels.

Also as referenced above, upon completion of construction activities, emission sources resulting from proposed Project operations would not result in net new emissions. As such, the proposed Project would not result in a cumulatively considerable net increase of any criteria air pollutants. As a result, this impact would be less than significant.

d) **Less than Significant.** Diesel emissions would be generated from diesel-powered construction equipment and diesel trucks associated with proposed Project construction. Diesel particulate matter (DPM) has been classified by CARB as a toxic air contaminant for the cancer risk associated with long-term (i.e., 70 years) exposure to DPM. Given that construction would occur for a limited amount of time and would be spread out over a large geographic area, localized exposure to DPM would be minimal. As a result, the cancer risks from the proposed Project associated with diesel emissions over a 70-year lifetime are very small. Therefore, the impacts related to DPM would be less than significant. Furthermore, as noted above, the proposed Project would result in emissions that are anticipated to be below relevant thresholds for criteria air pollutants during construction and operation of the proposed Project. As a result, this impact would be less than significant.

e) **Less than Significant.** The proposed Project consists of the dewatering of the existing overflow pond, excavation and grading and installation of a new 6 MG tank within the City. During construction of the proposed Project, the various diesel-powered vehicles and equipment in use on-site could create minor odors. These odors are not likely to be noticeable beyond the immediate Project area and, in addition, would be temporary and short-lived. Furthermore, the proposed Project would not include land uses associated with long-term objectionable odors. Therefore, this impact would be less than significant.

References

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2002. Guidance for Assessing and Mitigating Air Quality Impacts. January 10, 2002.

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. March 2015.

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2016a. *2016 Ozone Plan for 2008 8-hour Ozone Standard*. June 16, 2016.

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2016b. *2016 Moderate Area Plan for the 2012 $PM_{2.5}$ Standard*. September 15, 2016.

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2017. *Ambient Air Quality Standards and Valley Attainment Status*. Available: http://www.valleyair.org/aqinfo/attainment.htm. Accessed March 9, 2017.

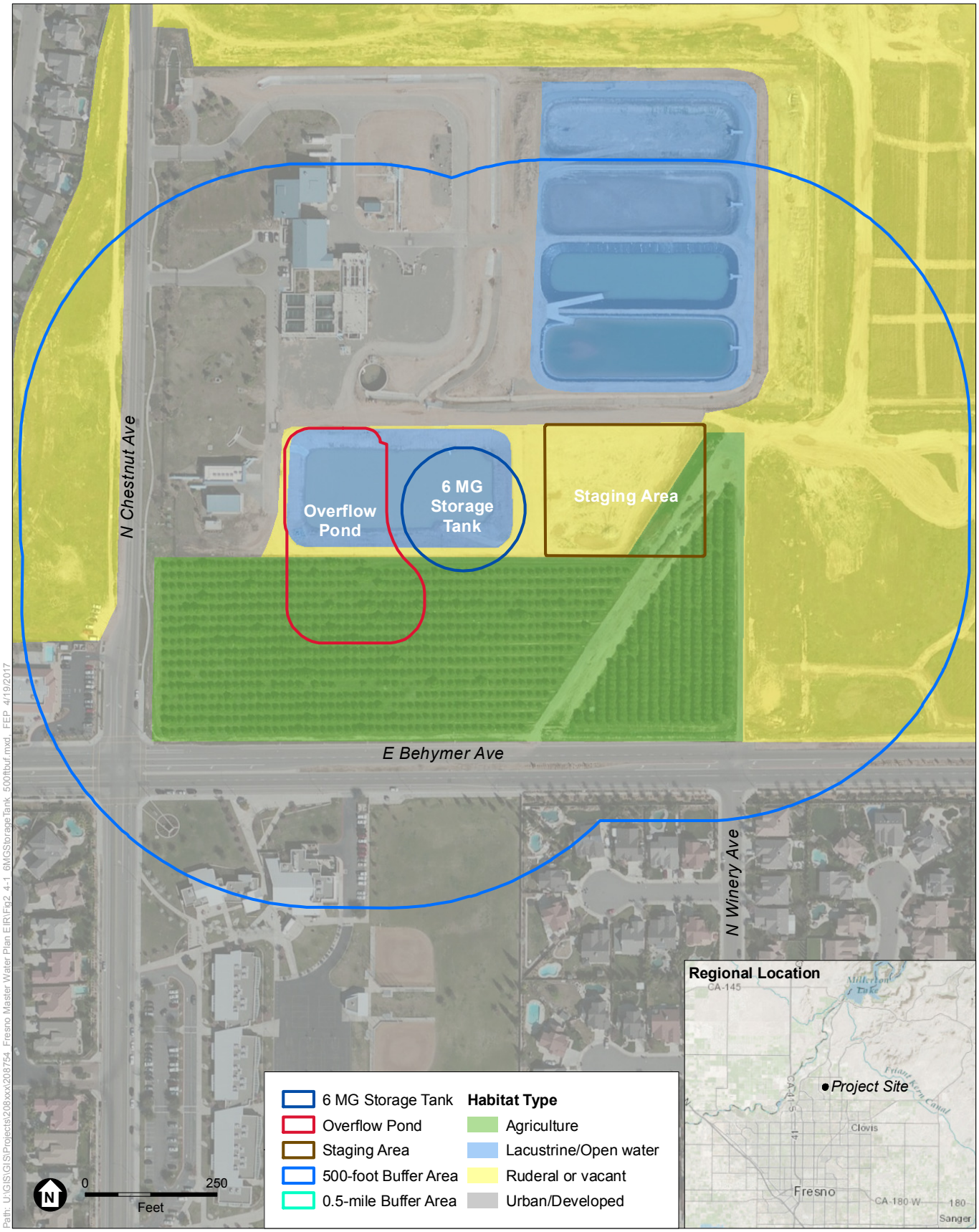
2.4 Biological Resources

Section 4.5 of the Metro Plan Update EIR addressed the effects of implementing the Metro Plan Update, including the proposed Project, on biological resources. The following discussion provides Project specific information relevant to biological resources.

This section characterizes and discusses the potential effects of the proposed Project on biological resources and identifies mitigation measures to avoid or reduce those impacts, where appropriate. Additionally, the following discussion summarizes the current regulatory status relevant to biological resources. The analysis was based upon a review of potentially occurring special-status species, wildlife habitats, vegetation communities, and jurisdictional waters of the U.S. The results of the assessment are based on a field survey, literature searches, and database queries of the California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDB), the U.S. Fish and Wildlife Service (USFWS) list of federal endangered species, and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants. Site reconnaissance was conducted in February 2017. Sources of reference data reviewed for this evaluation included the following:

- United States Geological Survey (USGS) Friant, Clovis, Lanes Bridge, and Fresno North 7.5 minute topographic quadrangles;
- Color aerial photography of the study area and vicinity;
- California Natural Diversity Database (CNDDB) reported occurrences of special-status species within the Friant, Clovis, Lanes Bridge, and Fresno North quadrangles;
- United States Fish and Wildlife Service (USFWS) list of threatened and endangered species with the potential to occur in or be affected by projects in the Project area; and
- California Native Plant Society (CNPS) list of rare and endangered plants known to occur on the Friant quadrangle and eight surrounding quadrangles.

During the reconnaissance survey, the ESA biologist conducted a pedestrian and windshield survey of the study area. The study area consisted of a 500-foot buffer and a half-mile buffer around the Project area (or project site). The Project area encompasses the 6 MG storage tank and overflow spill pond, within the existing and operational Fresno NESWTF (**Figures 2.4-1 and 2.4-2**). Construction of the proposed Project will also include a staging area adjacent to the 6 MG storage tank to the east. The existing NESWTF is located within a fenced and disturbed area where facility operations are ongoing. During the reconnaissance survey, habitats present were compared to the habitat requirements of the regionally occurring special-status species to determine which of these species had the potential to occur within the study area.

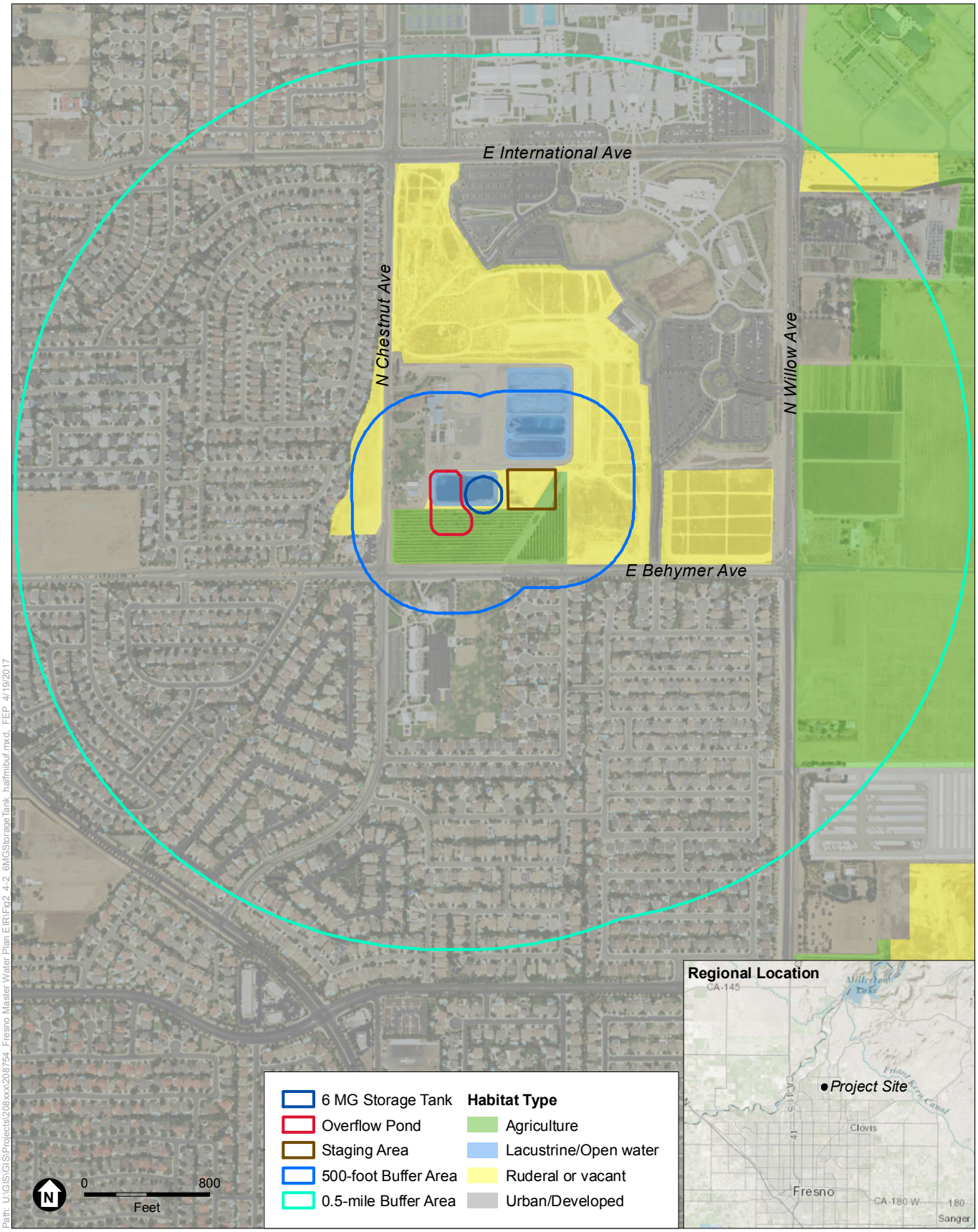


SOURCE: ESRI, 2014; City of Fresno, 2017; ESA, 2017

City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

Figure 2.4-1
Preconstruction Survey Map
500-foot Survey Area

ESA



SOURCE: ESRI, 2014; City of Fresno, 2017; ESA, 2017

City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

Figure 2.4-2
Preconstruction Survey Map
0.5-mile Survey Area

ESA

Environmental Setting

The Project area lies in the south central region of the San Joaquin Valley, which is the larger southern subregion of the Great Valley ecological region (Miles and Goudy, 1997). The Great Valley or Central Valley is a vast, low-lying plain almost entirely surrounded by mountains. The valley parallels the general north-south trend of the Sierra Nevada on the east and the California Coast Ranges on the west. The northern and southern portions of the Central Valley are referred to as the Sacramento Valley and San Joaquin Valley, respectively, with the Sacramento River draining areas to the north and the San Joaquin River draining areas to the south.

Historically, this region supported extensive annual grasslands intermixed with a variety of vegetative communities including oak woodland, wetland, and riparian woodland. Intensive agricultural and urban development has resulted in large losses and conversion of these habitats. The remaining native vegetative communities exist as isolated remnant patches with urban, suburban and agricultural landscapes, or in areas where varied topography has made urban and/or agricultural development difficult.

Elevation within the study area is approximately 380 feet above mean sea level (msl). Site topography is primarily flat level areas on developed land, and generally drains in an east to west direction. Current land uses within the Project area boundaries include agricultural and urban related to the treatment facility operations. Types of wildlife habitat present in the study area can be found in **Table 2.4-1** and **Figures 2.4-1** and **2.4-2**.

TABLE 2.4-1
STUDY AREA VEGETATION TYPES/WILDLIFE HABITAT

Habitat Type	Acres / Percent of Project Area[1]
Agriculture	2.35 / 36.2%
Ruderal / Vacant	1.98 / 30.5%
Lacustrine / Open Water	2.12 / 32.6%
Urban	0.05 / 0.8%
Total	**6.50/100%**

NOTE:
[1] Acreages based on the footprint of the project area.

SOURCE: Data collected and compiled by ESA in 2017.

Vegetation Types and Wildlife Habitats

Wildlife habitats are classified using the CDFW's California Wildlife Habitat Relationships (CHWR) classification system, which stems from A Guide to Wildlife Habitats of California (Mayer and Laudenslayer, 1988). Wildlife habitats generally correspond to vegetation type. Vegetation types are assemblages of plant species that occur together in a given area and are defined by species composition and relative abundance. Plant communities within the Project area were identified using field reconnaissance and aerial photography. The CWHR habitat classification scheme has been developed to support the CWHR System, a wildlife information

system and predictive model for California's regularly occurring birds, mammals, reptiles and amphibians.

The Metro Plan Update EIR contains greater detail regarding vegetation types which generally correlate with wildlife habitat types and those found within the study area. The Metro Plan Update EIR is incorporated by reference.[3]

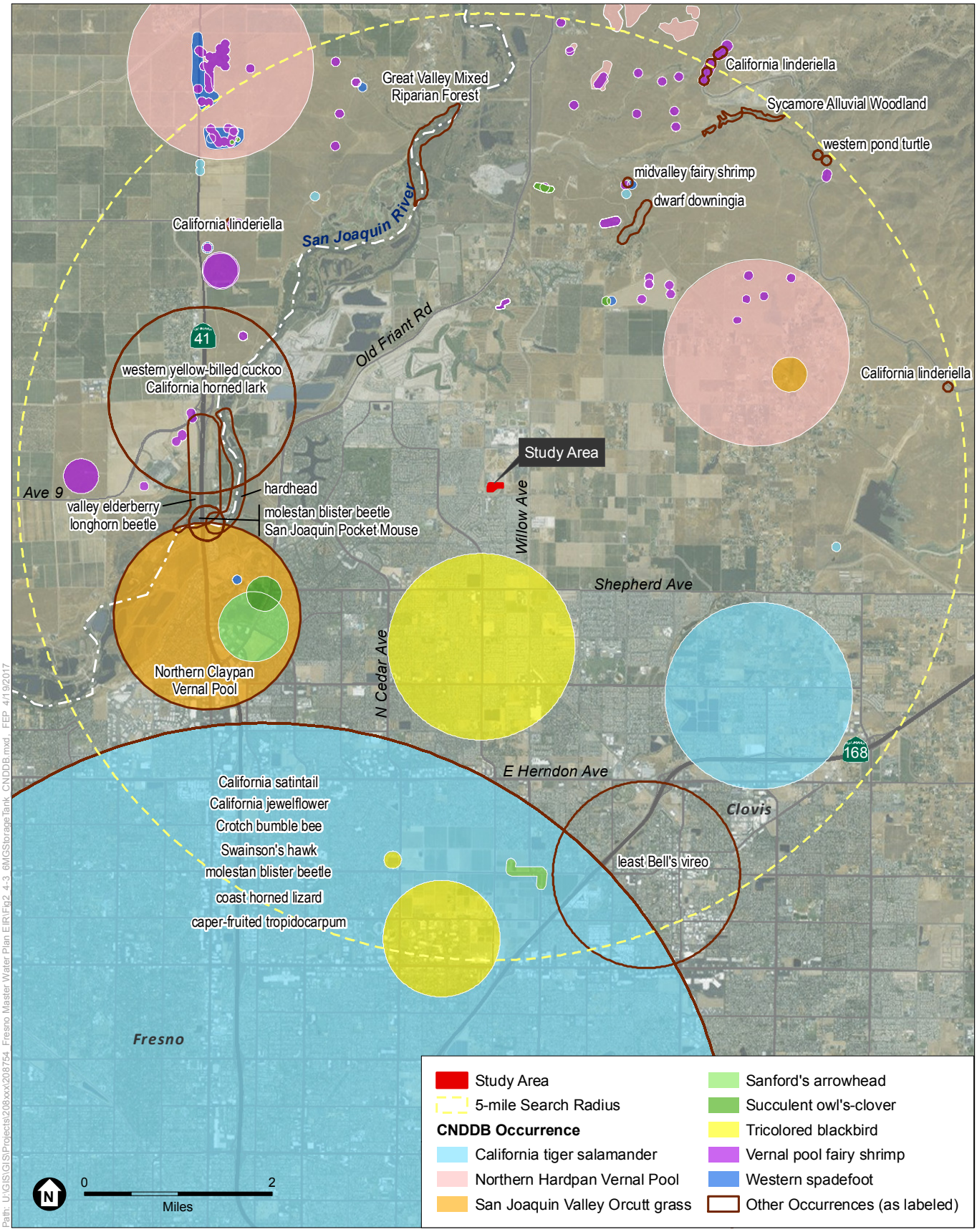
Special-Status Species

Special-status species are legally protected under the California Endangered Species Act (CESA) and the Federal Endangered Species Acts (FESA) or other regulations or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species are in the following categories:

1. Species listed or proposed for listing as threatened or endangered under FESA (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);
2. Species that are candidates for possible future listing as threatened or endangered under FESA (61 FR 40, February 28, 1996);
3. Species listed or proposed for listing by the State of California as threatened or endangered under CESA (15 California Code of Regulations [CCR] 670.5);
4. Plants listed as rare or endangered under the California Native Plant Protection Act (CNNP) (California Fish and Game Code, Section 1900 et seq.);
5. Animal species of special concern to CDFW;
6. Animals fully protected under FGC (FGC Sections 351 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
7. Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15280 provides that plant or animal species may be treated as "rare or endangered" even if not on one of the official lists (State CEQA Guidelines, Section 15380); and
8. Plants considered under CNPS to be "rare, threatened or endangered in California" (Rank 1A, 1B, and 2 in CNPS, 2013) as well as CNPS Rank 3 and 4 plant species.

A list of special-status species that have the potential to occur within the vicinity of the study area was compiled based on data in the CNDDB, the USFWS list of Federal Endangered and Threatened Species that Occur in or may be Affected by the proposed Project, and the CNPS Inventory of Rare and Endangered Plants. A list of special-status species, their general habitat requirements, and an assessment of their potential to occur with the Project area is provided in **Appendix C**. Recorded observations of special-status species within five miles of the Project area are shown in **Figure 2.4-3**.

[3] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm



SOURCE: ESRI, 2014; CDFW, 2017; ESA, 2017

City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

Figure 2.4-3
Special-status Species Occurrences within a 5-mile Search Radius

ESA

Wetlands and Other Waters of the U.S. and Waters of the State

Site Hydrology Overview

The Project area is situated on nearly flat terrain within the City of Fresno and surrounding areas. There is one concrete lined canal which conveys irrigation water to the outlying agricultural fields. Other hydrological features include four treatment ponds and one overflow pond. There are no other hydrological features in the proposed Project area.

Jurisdictional Waters of the U.S. and State

A formal wetland delineation has not been conducted for the Project area; however, based on the reconnaissance survey in February 2017 and consultation with the water agencies, there are no wetlands and other waters of the U.S. and no waters of the State in the Project area. The existing overflow pond and the treatment ponds north of the project area were not considered jurisdictional. Locations of the canal and ponds in the NESWTF are shown on Figure 2.4-2.

Metro Plan Update EIR Standards of Significance

Numerous federal and state regulations are designed to protect fish, wildlife, and plant resources. Federal and state regulations also protect waters of the U.S. and waters within the state from degradation. The Metro Plan Update EIR is incorporated by reference.[4]

The Metro Plan Update EIR considers impacts related to biological resources to be significant if the Metro Plan Update would:

- 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 Wildlife or U.S. Fish and Wildlife Service;

- 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 Wildlife or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- 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;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

[4] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm

Metro Plan Update Impacts

The Metro Plan Update EIR identifies impacts shown below, that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR are presented in **Appendix A**.

Biological Resources		Level of Significance Before Mitigation	Level of Significance After Mitigation
4.5.1	Implementation of the proposed project could result in potential disturbance or loss of special-status or migratory bird species and their habitats.	S	LS
4.5.2	Implementation of the proposed project could result in potential disturbance or loss of valley elderberry longhorn beetle and its host plant, the elderberry shrub.	S	LS
4.5.3	Implementation of the proposed project could result in potential disturbance or loss of western pond turtle and its habitat.	S	LS
4.5.4	Implementation of the proposed project could result in potential disturbance or loss of San Joaquin kit fox and its habitat.	S	LS
4.5.5	Implementation of the proposed project could result in potential disturbance or loss of American badger and its habitat.	S	LS
4.5.6	Proposed project activities could result in potential disturbance or loss of Western mastiff bat and hoary bat and their habitat.	S	LS
4.5.7	Implementation of the proposed project could result in significant effects to rare or special-status plants and their habitat.	S	LS
4.5.8	Implementation of the proposed project could result in the removal, filling, interruption or degradation of protected wetlands and other waters of the United States.	S	LS
4.5.9	Proposed project activities could result in the removal of street trees protected by the City of Fresno or oak woodland habitat located within Fresno County.	S	LS
4.5.10	Proposed project activities could potentially result in disturbance or loss of riparian habitat and/or lake or streambed alteration through direct and indirect impacts.	S	LS
4.5.11	Proposed project activities could potentially interfere with wildlife movement corridors through direct and indirect impacts.	LS	N/A
4.5.12	Implementation of the proposed project, when combined with development of other future projects, could contribute to the cumulative loss or degradation of habitat or species protected under federal, State and local regulations.	S	LS

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

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

a) **Impact Addressed in Metro Plan Update EIR.** The following subsections provide a discussion of potential effects to special-status plant and animal species.

Special Status Plants

No special-status plant species or species proposed for listing were identified as having the potential to occur within the Project area. No special-status plant species were observed during the reconnaissance survey. Therefore, the proposed Project would have no impact on special-status plant species. This issue will not be further evaluated.

Special-Status Wildlife: San Joaquin Kit Fox (SJKF)

Marginal suitable foraging habitat for SJKF is present within agricultural habitat onsite and limited suitable denning habitat is also available from burrows identified during the reconnaissance survey. While it is unlikely that SJKF would reside and den within the Project area, particularly due to limited to no access to suitable habitat and many barriers inhibiting SJKF movement from known populations (e.g., residential roads and

highways; commercial infrastructure), it is possible that this species could use available burrows for den sites or the agricultural fields as a movement corridor to more suitable habitat outside of the Project area. If the species is present during construction, disturbance associated with construction activities could potentially temporarily disrupt seasonal movement or harm individuals. Implementation of Metro Plan Update EIR **Mitigation Measures 4.5.4a and 4.5.4b** would reduce impacts to SJKF by surveying for occupied burrows and dens (if present), avoiding active dens, and reducing entrapment risk, therefore reducing impacts to SJKF during construction activities to less-than-significant levels.

Special-Status Wildlife: Nesting Songbirds and Raptors

Portions of the Project area may support nesting birds such as Swainson's hawk and burrowing owl. If nesting Swainson's hawk, burrowing owl, or other passerine birds and raptors protected by the Migratory Bird Treaty Act (MBTA) are present within or directly adjacent to the work area then construction activities could affect nesting behavior and/or cause nest abandonment and loss of reproductive potential. Other potential impacts to these species during proposed Project construction include the potential for harm to individual birds, if present, and the loss of suitable nesting and foraging habitat. Therefore, the proposed Project could have a potentially significant impact on nesting birds. Implementation of Metro Plan Update EIR **Mitigation Measures 4.5.1a, 4.5.1b, and 4.5.1c** would reduce impacts to less-than-significant levels by completing preconstruction surveys for active bird nests and implementing nest avoidance and no-disturbance buffer areas, as needed.

Special-Status Wildlife: Western Pond Turtle

Canals and detention ponds within portions of the proposed Project provide suitable aquatic habitat for the western pond turtle. If western pond turtles are present, onsite construction activities could cause site abandonment, potential harm for individuals, and the loss of suitable nesting habitat. Any direct mortality of individuals or impacts to nesting activities would be considered a significant impact. Implementation of Metro Plan Update EIR **Mitigation Measure 4.5.3** would reduce impacts to less-than-significant levels by completing preconstruction surveys and ensuring work does not occur in the vicinity of turtles and active nest sites.

b) **No Impact.** There was no riparian habitat identified onsite during the reconnaissance survey. Thus, no impacts to riparian habitat will occur as a result of the proposed Project and this issue will not be further evaluated.

c) **No Impact.** During the reconnaissance survey, there were no hydrological features identified as potential waters of the U.S. in the Project area. The treatment ponds and the overflow pond are actively being used as part of the treatment facility's routine operations. Thus, they are not considered potential jurisdictional waters. Thus, no impacts will occur to jurisdictional waters as a result of the proposed Project and this issue will not be further evaluated.

d) **Impact Addressed in Metro Plan Update EIR.** The proposed Project would not substantially interfere 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. The Project area is not located within an established native resident or migratory wildlife corridor or wildlife nursery site. However, as mentioned under Checklist Section Item 2.9.a, some of the Project area is within agricultural land and adjacent to ruderal habitat, which may be used by SJKF or other resident wildlife species such as raccoon or coyote. Construction activities could result in a permanent loss of suitable habitat or disruption of movement for SJKF. Construction noise could also temporarily alter foraging patterns of resident wildlife species. Implementation of Metro Plan Update EIR **Mitigation Measures 4.5.4a**, **4.5.4b**, **and 4.5.5** would reduce this impact to a less-than-significant level by surveying for presence of special status mammals and potential mammal dens, avoiding the dens (if present), reducing wildlife entrapment risk, and ensuring food-related trash is properly disposed to avoid attracting wildlife to the Project area during implementation.

e) **No Impact.** Two acres of orange trees in the southern portion of the Project area are scheduled for removal. None of these trees are considered protected by the City of Fresno and Fresno County as described in the Fresno Municipal Code (F.M.C 11-305).

There are also trees located along the roadway within the 500-foot study area, adjacent to residential properties, and within the open space park within the NESWTF. None of these trees will need to be removed; therefore no significant impacts will occur to any nearby trees that may be protected by the City of Fresno and Fresno County.

f) **No Impact.** There are no planned or adopted Habitat Conservation Plans or Natural Community Conservation Plans for the areas encompassing the Project area. *The Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS, 1998) does not identify the area within and adjacent to the Project area as having regional biological significant for the species covered in the plan. Therefore, the proposed Project would not conflict with any adopted conservation or recovery plans and this issue will not be further evaluated.

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United States Geological Survey (USGS), 1973. Lanes Bridge, California, Fresno County, 7.5-minute Topographic Quadrangle.

2.5 Cultural Resources

Section 4.12 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on cultural resources. Additionally, an updated intensive pedestrian field survey was completed for the Project site. For additional background information on cultural resources, please refer to Section 4.12 of the Metro Plan Update EIR.

Environmental Setting

The proposed Project is located predominantly within the existing developed footprint of NESWTF in the City of Fresno and Fresno County. The proposed Project is located on the "Friant" U.S. Geological Survey 7.5-minute topographic quadrangle in Fresno County (T/R/Section 12S/20E/Sec13). The proposed Project is located in a primarily urbanized area, with residential neighborhoods and open space areas adjacent to the Project site. **Figure 2.5-1** shows the Area of Potential Effect.

The San Joaquin Valley has been shaped by human occupation since the arrival of the earliest peoples over 11,000 years ago. At the time of Euro-American contact, the Project area consisted of the southernmost territory occupied by the Northern Valley Yokuts. The Northern Valley Yokuts historically lived in California along the San Joaquin River as far north as where it bends north between the Calaveras and the Mokelumne rivers, as far south as Fresno, to the west to the Diablo Range, and as far east as the foothills of the Sierra Nevada. The Yokuts may have been fairly recent arrivals in the San Joaquin Valley, perhaps being pushed out of the foothills about 500 years ago.

State legislation in 1856 organized Fresno County from portions of Mariposa, Merced and Tulare counties. The development of the Central Pacific Railroad (predecessor of the Southern Pacific Railroad) in 1872 resulted in the creation of the town of Fresno, originally called "Fresno Station." Prior to the 1870s, "dry farming" dominated Fresno County between the San Joaquin and Kings rivers. Dry farming relied on spring rains, however the 1860s experienced extensive drought years, causing residents to explore alternative means for providing water for crops. Settlers dug ditches along major drainages, such as the Kings River, with the earliest ditches supplying water to the community of Centerville via the Centerville Ditch. The modern canal system operated by the Fresno, Consolidated, and Alta irrigation districts were begun during the 1870s and 1880s, with a variety of private parties taking the lead.

The 1910 census for Fresno showed a total population of 24,892. City boosters, hoping to double the population within a few short years, promoted Fresno as an attractive and modern Californian city, with handsome public buildings, established city parks, numerous banks and commercial opportunities, and large tracts of developable land outside the city proper. Throughout the prosperous 1920s, new residents migrated to Fresno, attracted by the City's agricultural wealth and prosperity. The Great Depression that began in 1929 had a significant impact on the San Joaquin Valley, with a great influx of people seeking employment in an already strained market. Midwestern farmers who could not find employment in the agricultural industry at home came to cities like Fresno looking for other forms of employment, but few urban jobs were available. Mobilization of industry in support of World War II ultimately ended the Great Depression. In the

SOURCE: ESRI, 2014; City of Fresno, 2017; ESA, 2017

City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project

Figure 2.5-1
Area of Potential Effect

ESA

years following World War II, California experienced a period of prosperity with unprecedented urban growth and economic expansion. In Fresno, the 1940 census reported 60,685 people, while the 1950 census reported a population of 91,669, not including interred Japanese citizens or military personnel. The population boom resulted in extensive building efforts with new civic and public buildings, highways, residential and commercial developments. Architecture moved away from historic styles and focused on more modernist elements and innovations. Suburban expansion drove much of the residential and commercial development outside of city centers. Agricultural parcels were subdivided to establish tract homes and regional shopping centers and facilities that would provide services for the new population. Additionally, community and regional planning during the mid-twentieth century was highly influenced by the growing use of the automobile and establishment of freeways. Automobiles enabled people to move farther away from the downtown, resulting in businesses as well as municipal services expanding or moving to accommodate their customers' needs. The Metro Plan Update EIR is incorporated by reference.[5]

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to cultural resources to be significant if the Metro Plan Update would:

- Cause a substantial adverse change in the significance of a historical resource that is either listed or eligible for listing in the National Register, the California Register, or a local register of historic resources;
- Cause a substantial adverse change in the significance of a unique archaeological resource;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Additionally, as explained below, impacts regarding Tribal Cultural Resources under Assembly Bill (AB) 52 are included in the impact discussion. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

[5] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm

Cultural Resources		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.12-1	Implementation of the proposed project could adversely impact historic architectural resources directly through demolition or substantial alteration, or indirectly through changes to historical setting.	S	SU
4.12-2	Implementation of the proposed project could result in damage or destruction of known or previously unidentified archeological resources.	S	LS
4.12-3	Ground-disturbing activities associated with construction of the proposed project could result in damage to previously unidentified human remains.	S	LS
4.12-4	Ground-disturbing construction associated with implementation of the proposed project could result in disturbance or destruction of a paleontological resource.	S	LS
4.12-5	Implementation of the proposed project, combined with other projects could result in the loss or destruction of historical architectural resources.	S	SU
4.12-6	Implementation of the proposed project, combined with other projects could result in the loss of destruction of archaeological and/or paleontological resources.	S	LS

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
5. CULTURAL RESOURCES — Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☐	☒
c) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	☐	☐	☐	☐	☒
d) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☐	☒
e) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☐	☒

a) **No Impact.** 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 any building, structure, site, or object listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR), or determined by the lead agency

(City) to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. As determined by the archival review conducted at the San Joaquin Valley Information Center (File No. RS# 10-291), no cultural resources have been previously recorded within or adjacent to the Project area. Two cultural resource surveys have been previously conducted within 0.25 mile of the Project area (FR1692 and FR1607), along with an intensive field survey of the entire NESWTF conducted by Environmental Science Associates (ESA) in 2011. The NESWTF is surrounded by modern development, with no historic period built resources within or adjacent to the site. As a result, no impact would occur.

b-c) **Impact Addressed in Metro Plan Update EIR.** CEQA requires the lead agency to consider the effects of a project on archaeological resources and to determine whether any identified archaeological resource is a historical resource. CEQA Guidelines Section 15064.5 also requires consideration of potential project impacts on "unique" archaeological resources that do not qualify as historical resources. PRC Section 21083.2 defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria. The resource:

1. contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
2. has a special and particular quality, such as being the oldest of its type or the best available example of its type; and/or
3. is directly associated with a scientifically recognized important prehistoric or historic event or person.

PRC Section 15064.5(c) (4) provides that, if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of a project on the resource are not considered significant.

In September of 2014, the California Legislature passed AB 52, which added provisions to the PRC regarding the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze project impacts on "tribal cultural resources," separately from archaeological resources (PRC Sections 21074 and 21083.09). The Bill defines "tribal cultural resources" in a new section of the PRC Section 21074. AB 52 also requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, 21082.3). Finally, AB 52 requires the Office of Planning and Research to update Appendix G of the CEQA Guidelines by July 1, 2016 to provide sample questions regarding impacts to tribal cultural resources (PRC Section 21083.09).

ESA staff requested a search of the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) database on February 2, 2017, per the requirements of AB 52.

The NAHC responded via email, on February 9, 2017, providing a list of knowledgeable persons to contact, and stating that the results of the SLF search failed to indicate the presence of any known sacred Native American sites in the immediate Project area. ESA contacted the individuals and organizations affiliated with the area as identified by the NAHC by certified letter on February 10, 2017 to solicit their comments and concerns regarding the Project. On February 29, 2017, ESA staff made follow up phone calls to the individuals and organizations provided by the NAHC. ESA received a certified letter from the Table Mountain Rancheria on March 6, 2017, stating that they decline to participate at this time, but would appreciate being notified in the unlikely event that cultural resources are identified. On March 8, 2017, the Tule River Indian Tribe contacted the City of Fresno via email, deferring consultation to Table Mountain Rancheria. No additional responses have been received by the writing of this report.

Results of the cultural resources records search conducted at the SSJVIC indicate that 2 surveys have been previously conducted within or intersect the NESWTF site, with no surveys conducted within the 0.25 mile buffer of the Project site. No historic or prehistoric archaeological sites have been previously recorded within the alignment or within the 0.25 mile buffer.

On February 21, 2017, ESA archaeologist Mai Lee conducted a pedestrian field survey of the Project footprint. The survey covered the grove, the area around the overflow spill pond, and large open area around the southern edge of the NESWTF. Intensive pedestrian survey methods, consisting of walking parallel 30-meter transects and inspecting the ground surface, were used for the grove and large open area. The current location of the overflow spill pond was not surveyed due to the presence of water obscuring the ground surface; however, the remainder of the Project footprint was surveyed through intensive pedestrian survey of areas of exposed natural soils. The entire Project footprint appears to have been disturbed from water treatment plant construction, along with historic-period agricultural and/or modern development activities. Ground visibility varied significantly throughout the Project footprint, from 0-20 percent in areas of dense vegetation (short to tall grasses) throughout the grove adjacent the Surface Water Treatment Facility to 50-95 percent in roads and exposed patches around the large open area and overflow spill pond. Field survey identified no prehistoric or historic period archaeological resources.

While neither archival research nor field survey identified any prehistoric or historic period archaeological resources, earth-moving activities associated with the construction of the proposed Project have the potential to result in the damage or destruction of subsurface resources not visible during the survey. This would be considered a potentially significant impact to both archaeological and tribal cultural resources. The accidental discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted. In the unlikely event that archaeological materials are unearthed, implementation of Metro Plan Update EIR **Mitigation Measures 4.12-2b and 4.12-2c**, which would include implementation of a construction worker training program and measures to protect the unexpected discovery of subsurface resources during

construction, would reduce potential proposed Project impacts to archaeological resources to less than significant.

d) **Impact Addressed in Metro Plan Update EIR.** Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. In general, older sedimentary rocks (more than 10,000 years old) are considered most likely to yield vertebrate fossils of scientific interest.

The Project site is located in Great Valley Sequence alluvial fans (Qf) and Pleistocene nonmarine sediments (Qc). Great Valley Sequence sediments date to the Holocene-age (10,000 years Before Present [BP] to Present Day), and are typically considered too young to contain significant paleontological resources. Pleistocene non-marine sediment is designated as having a moderate paleontological sensitivity (Matthews, 1965). While no known paleontological resources or unique geologic features exist within the Project area, the potential for discovery of paleontological resources during construction cannot be discounted. Implementation of Metro Plan Update EIR **Mitigation Measures 4.12-4a and 4.12-4b** would reduce proposed Project impacts to less than significant by providing for review of discovered paleontological resources by a qualified paleontologist, and implementation of a resource monitoring and mitigation program, as relevant. As a result, this potential impact would be reduced to less than significant.

e) **Impact Addressed in Metro Plan Update EIR.** Results of the archival review and field survey discussed above indicate that the Project area has a low potential to contain buried cultural materials, including human remains. However, the possibility of uncovering human remains cannot be entirely discounted. In the unlikely event that human remains are uncovered during ground-disturbing activity, implementation of Metro Plan Update EIR **Mitigation Measure 4.12-3**, which would include contacting the County coroner and the Native American Heritage Commission as warranted, would reduce proposed Project impacts on undiscovered human remains to less than significant.

2.6 Geology, Soils, and Seismicity

Section 4.3 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, related to geology, soils, and seismicity. The following discussion provides proposed Project-specific information relevant to geology, soils, and seismicity.

Environmental Setting

The City of Fresno is located in the southern portion of the Great Central Valley geomorphic province of California (Central Valley) which is an approximately 50-mile-wide and 400-mile-long northwestward-trending trough in the center of California between the Coast Range to the west and the Sierra Nevada to the east. The northern and southern portions of the Central Valley are referred to as the Sacramento Valley and San Joaquin Valley, respectively, with the Sacramento River draining areas to the north and the San Joaquin River draining areas to the south. The topography of the Central Valley is relatively level, with elevations ranging from a few feet to a few hundred feet above mean sea level (msl). Topography in the Fresno area is generally flat or gently sloping with an elevation of approximately 300 feet above msl.

The City of Fresno is not in an Alquist-Priolo Special Studies Zone and there are no underlying active earthquake faults (City of Fresno, 2014). Therefore, the Fresno area experiences minimal risk associated with seismic activity. Project area soils are well drained and have a low to moderate shrink-swell potential and low erosion hazard. The Metro Plan Update EIR is incorporated by reference.[6]

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers any impacts related to geology and soils significant if the Metro Plan Update would:

- Expose people or structures to potential substantial adverse effects, including the risk of, injury, or death involving strong seismic ground shaking, seismic-related ground failure (including liquefaction), or landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located in a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; or
- Be located on expansive soil, as defined in Table 18-1-B of the 1994 Uniform Building Code, creating substantial risks to life or property.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identified the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels

[6] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm

of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Geology and Soils		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.3-1	Proposed project facilities could be at risk of potential damage resulting from strong seismic ground shaking, seismically-related ground failure, or landslides.	S	LS
4.3-2	Activities associated with the construction of proposed project facilities could result in substantial soil erosion or loss of topsoil.	LS	N/A
4.3-3	Proposed project facilities could be at risk of damage due to unstable soil conditions.	S	LS
4.3-4	Implementation of the proposed project, in combination with other development projects, could increase the risk of damage to structures due to seismically induced groundshaking and unstable soil conditions.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the Project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐	☐

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the Project:					
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒	☐

a.i) **No Impact.** According to the Fresno General Plan (City of Fresno, 2014), the City of Fresno is located in one of the more geologically stable areas of California, containing no Alquist-Priolo Earthquake Fault Zones. Therefore, rupture of a known fault is not anticipated within or in the immediate vicinity of the Project area. No impact would occur.

a.ii-iii) **Impact Addressed in Metro Plan Update EIR.** The closest known fault is the Ortigalita fault. The USGS identifies the greater Fresno area as having relatively low potential for seismic activity, with seismic hazards (2 percent in 50 years) peak ground acceleration ranging from 0.1 to 0.25 times the acceleration of gravity (g; USGS, 2014).[7] Soils underlying the City are characterized as having low liquefaction potential. In addition, the topography is relatively flat and landslides would be unlikely to occur. The proposed Project would involve excavating, grading, and trenching on primarily level terrain and would incorporate the use of trench shoring measures consistent with the Uniform Building Code (UBC) and Occupational Safety and Health Administration (CAL/OSHA) requirements for trenching and excavation activities. In order to ensure that potential impacts are minimized, implementation of Metro Plan Update EIR **Mitigation Measures 4.3.1a and 4.3.1c** would be required. These measures would provide for the preparation of a soil and geotechnical engineering study for the Project and would also ensure adherence to pipeline design guidelines provided by the American Water Works Association. Therefore, potential impacts would be reduced to less-than-significant levels.

a.iv) **Less than Significant.** The City is located in an area that has a predominately flat topography. Landslides primarily occur in coastal and mountainous regions with steep topography. However, they can also occur where trenching and excavations are done for infrastructure installation and preparation of building foundations. Although the proposed Project would involve these activities, because the topography in the Project area is relatively flat and the proposed Project does not include installation of any infrastructure within 0.5 mile of the bluffs along the San Joaquin River, the risks associated with landslides would be minimal. In addition, all construction techniques would be required

7 San Francisco, by contrast, is rated at 1.8+ g.

to comply with UBC requirements to minimize risks associated with unstable soil conditions. Therefore, this impact would be less than significant.

b) **Less than Significant.** Construction activities would occur within the existing facility and would result in only limited removal of trees from the citrus grove. The soils within the Project area have a low to moderate potential for wind and water erosion (NRCS, 2017). As a result, strong potential for soil erosion during construction and operation of the proposed Project is not anticipated. This impact would be less than significant.

c) **Less than Significant.** The proposed Project construction would occur on soils that are relatively stable and have a low potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, this impact would be less than significant.

d) **Impact Addressed in Metro Plan Update EIR.** Expansive clay soils are present in some parts of the City; however, the proposed Project would be constructed in areas with soils having low to moderate shrink-swell potential. In addition, some soils in the Project area contain a high potential for corrosion of untreated steel. If left unprotected, these soils could damage underground utilities, including pipelines. Implementation of Metro Plan Update EIR **Mitigation Measures 4.3.1a-c** would ensure that corrosive soils within the Project area would be identified on a location-by-location basis, and that appropriate construction measures would be implemented in order to offset potential impacts associated with corrosive soils. These measures would reduce the impact to less than significant.

e) **No Impact.** The proposed Project would not install septic systems or alternative wastewater disposal systems. No impact would occur.

References

California Department of Conservation (CDC), 2008. Earthquake Shaking Potential for California. Available: http://www.consrv.ca.gov/cgs/information/publications/ms/Documents/MS48_revised.pdf. Accessed March 16, 2017.

City of Fresno, 2014. Fresno General Plan. Prepared by City of Fresno Development and Resource Management Department. December 18, 2014.

United States Department of Agriculture, Natural Resources Conservation Service (NRCS).Web Soil Survey. Available: http://websoilsurvey.nrcs.usda.gov/. Accessed March 16, 2017.

United States Geological Survey (USGS), 2014. Seismic Hazard Maps and Data. Available: http://earthquake.usgs.gov/hazards/. Accessed April 17, 2014.

2.7 Greenhouse Gas Emissions

Section 4.7 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan, including the proposed Project, on greenhouse gas (GHG) emissions and climate change. The following discussion provides Project-specific information relevant to GHG emissions.

Environmental Setting

CEQA requires lead agencies to consider the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to raise sea levels and affect rainfall, snowfall, and habitat.

As revised pursuant to Senate Bill (SB) 97 adopted in 2007 (PRC Section 21083.05) and effective in mid-2010, the State CEQA Guidelines require lead agencies to describe, calculate, or estimate the amount of GHG emissions that would result from a project. Moreover, the State CEQA Guidelines emphasize the necessity to determine potential climate change effects of the project and propose mitigation as necessary. The State CEQA Guidelines confirm the discretion of lead agencies to determine appropriate significance thresholds, but require the preparation of an EIR if "there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with adopted regulations or requirements" (Section 15064.4). State CEQA Guidelines Section 15126.4 includes considerations for lead agencies related to feasible mitigation measures to reduce GHG emissions, which may include, among others, measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency's decision; implementation of project features, project design, or other measures which are incorporated into the project to substantially reduce energy consumption or GHG emissions; offsite measures, including offsets that are not otherwise required, to mitigate a project's emissions; and, measures that sequester carbon or carbon-equivalent emissions. The Metro Plan Update EIR is incorporated by reference[8] and discusses relevant Senate Bills and Executive Orders, the California Climate Change Scoping Plan including their targets for GHGs and relationship to the proposed Project.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact related to GHGs to be significant if the Metro Plan Update would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHG (including AB 32, the California Global Warming Solutions Act of 2006, and the AB 32 Scoping Plan).

[8] http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/importantdocuments.htm

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance. No mitigation measures for GHG emissions were applied in the Metro Plan Update EIR.

Greenhouse Gas Emissions		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.7-5	Construction and operation of the project could result in a cumulatively considerable increase in greenhouse gas emissions	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
7. 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?	☐	☐	☒	☐	☐

a-b) **Less than Significant.** SVJAPCD's GHG guidance is intended to streamline CEQA review by pre-quantifying emissions reductions that would be achieved through the implementation of best performance standards (BPS). Projects are considered to have a less-than-significant cumulative impact on climate change if any of the following conditions are met (SJVAPCD, 2009).

1. Comply with an approved GHG reduction plan;
2. Achieve a score of at least 29 using any combination of approved operational BPS;
3. Reduce operational GHG emissions by at least 29 percent over business-as-usual (BAU) conditions (demonstrated quantitatively).

The latest adopted GHG reduction plan for the City Fresno is located in Appendix F.2 ("Greenhouse Gas Reduction Plan") of the General Plan Development Code Update Master Environmental Impact Report (EIR), certified in 2014 (City of Fresno, 2014) (SCH #2012111015). The City has adopted a large number of goals, policies, and

programs to reduce GHG emissions, as outlined in the City's GHG reduction plan. The following policies found in the General Plan are applicable to the proposed Project:

Policy RC-6-d **Recycled Water.** Prepare, adopt, and implement a City of Fresno Recycled Water Master Plan.

Policy RC-7-a **Water Conservation Program and 2035 Target.** Maintain a comprehensive conservation program that reduces per capita water usage in the city's water service area to 243 gallons per capita per day (gpcd) by 2020 and 190 gpcd by 2035, by adopting conservation standards and implementing a program of incentives, design and operation standards, and user fees.

- Support programs that result in decreased water demand, such as landscaping standards that require drought-tolerant plants, rebates for water conserving devices and systems, turf replacement, xeriscape landscape for new homes, irrigation controllers, commercial/industrial/institutional water conserving programs, prioritized leak detection program, complete water system audit, landscape water audit and budget program, and retrofit upon resale ordinance.

- Implement the U.S. Bureau of Reclamation Best Management Practices for water conservation as necessary to maintain the City's surface water entitlements.

- Adopt and implement policies in the event an artificial lake is proposed for development.

- Work cooperatively toward effective uniform water conservation measures that would apply throughout the Planning Area.

- Expand efforts to educate the public about water supply issues and water conservation techniques.

Policty RC-7-f **Implementation and Update Conservation Program.** Continue to implement the City of Fresno Water Conservation Program, as may be updated, and periodically update restrictions on water uses, such as lawn and landscape watering and the filling of fountains and swimming pools, and penalties for violations. Evaluate the feasibility of a 2035 conservation target of 190 gpcd in the next comprehensive update of the City's Water Conservation Program.

The proposed Project would replace the existing 1.5 MG water storage tank with a new 6 MG tank at the City's NESWTF. This facility upgrade will allow the NESWTF to hold additional treated water to be pumped into the water distribution system and reduce the need for groundwater under high demand conditions. By increasing the NEWSTF water storage capacity, the proposed Project will help the City implement a Recycled Water

Plan (Policy RC-6-d), Water Conservation and Program 2035 Target (Policy RC-7-a) and implementation and update conservation program (Policy RC-7-f). Therefore, the proposed Project is consistent with Option 1 (listed above) because it would be consistent with an approved GHG reduction plan.

Options 2 and 3 both require projects to achieve GHG reductions consistent with the goals of AB 32, which require a reduction in statewide GHG emissions to 1990 levels by 2020 (equivalent to a 29 percent reduction over BAU conditions). However, since the publication of the SVJAPCD's GHG guidance in 2009, the California Supreme Court considered the CEQA issue of determining the significance of GHG emissions in its decision, Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming (CBD v. CDFW). The Court made a ruling on a common CEQA approach to GHG analyses for development projects that compares project emissions to the reductions from BAU that will be needed statewide to reduce emissions to 1990 levels by 2020, as required by AB 32. The court upheld the BAU method as valid in theory, but concluded that the BAU method was improperly applied in the case of the Newhall project because the target for the project was incorrectly deemed consistent with the statewide emission target of 29 percent below BAU for the year 2020. In other words, the court said that the percent below BAU target developed by the AB 32 Scoping Plan is intended as a measure of the GHG reduction effort required by the State as a whole, and it cannot necessarily be applied to the impacts of a specific project in a specific location. The Court provided some guidance to evaluating the cumulative significance of a proposed land use project's GHG emissions, but noted that none of the approaches could be guaranteed to satisfy CEQA for a particular project. The Court's suggested "pathways to compliance" include:

1. Use a geographically specific GHG emission reduction plan (e.g., climate action plan) that outlines how the jurisdiction will reduce emissions consistent with State reduction targets, to provide the basis for streamlining project-level CEQA analysis, as described in CEQA Guidelines Section 15183.5.

2. Use the Scoping Plan's BAU reduction goal, but provide substantial evidence to bridge the gap between the statewide goal and the project's emissions reductions;

3. Assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce GHG emissions from particular activities; as an example, the Court points out that projects consistent with a SB 375 Sustainable Communities Strategy (SCS) may need to re-evaluate GHG emissions from cars and light trucks.

4. Rely on existing numerical thresholds of significance for GHG emissions, such as those developed by an air district.

In light of the Newhall decision and the reliance of the SVJAPCD's GHG guidance on statewide percentage reduction of GHG emissions by 2020, assessment of potential GHG emission impacts under CEQA is assessed herein using a two-fold approach:

1. Does the proposed Project include reasonably feasible measures (i.e., BPS) to reduce GHG emissions; and

2. Although not strictly applicable to projects within the SJVAB, would the project emissions exceed the Bay Area Air Quality Management District (BAAQMD) GHG mass emission (or bright line) threshold of 1,100 metric tons of CO2e per year (BAAQMD, 2010).

Total GHG emissions from Project construction amortized over a 30 year period were estimated using California Emissions Estimator Model (CalEEMod v2016.3.1) and were found to be 21.9 metric tons of CO_2e per year. Construction of the proposed Project would not result in a cumulatively considerable increase in GHG emissions, well below the BAAQMD established GHG threshold of 1,100 metric tons of CO_2e per year.

Operational GHG emissions for the proposed Project would be generated primarily from on-road vehicular traffic. However, employee trips required periodically for routine inspection and maintenance would not be more than those generated under current operations. These trips would result in negligible GHG emissions. Since the Project site would be powered by electricity generated offsite, long-term operation of the proposed Project would not require the use of an onsite diesel powered generator known to generate GHG emissions.

Since Project-related construction and operation GHG emissions would not exceed the established BAAQMD GHG significance threshold of 1,100 metric tons of CO_2e per year, and because the proposed Project would not conflict with the City's adopted GHG reduction strategies, the Project's GHG impact would be less than significant.

References

Association of Environmental Professionals (AEP), 2016. *Final White Paper Beyond 2020 and Newhall*. October 2016.

Bay Area Air Quality Management District (BAQMD), 2010. *CEQA Air Quality Guidelines*. May 2010.

San Joaquin Valley Air Pollution Control District (SJVAPCD), 2009. *District Policy: Addressing GHG Emissions Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. December 17, 2009.

2.8 Hazards and Hazardous Materials

Section 4.9 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, relevant to hazards and hazardous materials. The following discussion provides Project-specific information relevant to hazards and hazardous materials.

Environmental Setting

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.[9] In some cases, past industrial or commercial uses can result in spills or leaks of hazardous materials and petroleum to the ground, resulting in soil and groundwater contamination. Federal and state laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. The CCR, Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste. The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government.

Information about hazardous materials sites in the Project area was collected by conducting a review of the California Environmental Protection Agency's (Cal EPA) Cortese List Data Resources (Cortese List). The Cortese list includes the following data resources that provide information regarding the facilities or sites identified as meeting the Cortese list requirements: the list of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database; the list of Leaking Underground Storage Tank (LUST) sites from GeoTracker database; the list of solid waste disposal sites identified by the State Water Resources Control Board; the list of active Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Resources Control Board; and the list of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code identified by DTSC. The Cortese List is a reporting document used by the state, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The Cortese List is updated at least annually, in compliance with California regulations (California Code Section 65964.6(a)(4)). The Cortese List includes federal superfund sites, state response sites, non-operating hazardous waste sites, voluntary cleanup sites, and school cleanup sites.

Based on a review of the Cortese List conducted in March 2017, there are no listed sites located within 0.5 mile of the Project area (DTSC, 2017).

9 State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers impacts related to hazards and hazardous materials to be significant if the Metro Plan Update would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
- 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.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Hazards and Hazardous Materials		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.9-1	Construction of proposed project facilities could result in the potential exposure of construction workers, the public and the environment to existing soil and/or groundwater contamination.	S	LS
4.9-2	Construction of the proposed project could involve the use, storage or transport of hazardous materials which if released could result in a potential risk to the public and the environment.	LS	N/A

Hazards and Hazardous Materials		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.9-3	Operation of the proposed project could involve the use, storage or transport of hazardous materials which if released could result in a potential risk to the public and the environment.	LS	N/A
4.9-4	Proposed project facilities could be located within one quarter mile of a school resulting in potential hazards associated with accidental release of hazardous materials.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
8. 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 for people residing or working in the Project area?	☐	☐	☐	☒	☐
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
8. HAZARDS AND HAZARDOUS MATERIALS — Would the Project:					
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒	☐

a) **Less than Significant.** Construction activities would likely require use of limited quantities of hazardous materials such as fuels for construction equipment, oils, and lubricants. The improper use, storage, handling, transport or disposal of hazardous materials could result in accidental release of hazardous materials, thereby exposing construction workers, the public and the environment, including soil and/or ground or surface water, to hazardous materials contamination. Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and California Department of Transportation (Caltrans), and use of these materials is regulated by DTSC, as outlined in Title 22 of the CCR. Any proposed Project facilities that would use or store hazardous materials would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. Additional applicable regulations are discussed in detail in the Metro Plan Update EIR. Compliance with these laws and requirements would ensure that potential impacts would be minimized. As a result, this impact would be less than significant.

b) **Less than Significant.** The proposed Project would involve excavation, grading, and trenching within the existing facility, however no known hazardous materials sites are known to exist within the Project area. Therefore, the proposed Project would not create a significant hazard to the public or the environment through the release of hazardous materials. As a result, this impact would be less than significant.

c) **Less than Significant.** Proposed Project construction activities and operations would likely require use of limited quantities of hazardous materials. The improper use, storage, handling, transport or disposal of hazardous materials could result in accidental release of hazardous materials, which could occur in close proximity to a school (Riverview Elementary School is located approximately 165 feet south of the Project site, across Behymer Avenue). However, because numerous laws and regulations govern the transport, use, storage, handling and disposal of hazardous materials impacts associated with proposed Project facilities within 0.25 mile of a school would be minimized. As a result, this impact would be less than significant.

d) **No Impact.** The proposed Project is not located on a site which is known to be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the proposed Project would not create a significant hazard to the public or the environment. There would be no impact.

e,f) **No Impact.** There are no airports within the vicinity of the project area. The Fresno Yosemite International Airport is located over 6 miles to the south of the proposed Project. The Fresno Chandler Executive Airport is located over 11 miles to the southwest of the proposed Project. There are no known private airstrips within 2 miles of the proposed Project. Therefore, there would be no impact.

g) **No Impact.** Construction of the proposed Project would occur within the existing NESWTF and would not interfere with traffic flow or roadway use. Construction would not physically interfere with emergency vehicle access and evacuation routes and staging would occur onsite, as discussed under Transportation and Traffic, below. There would be no impact.

h) **No Impact.** Construction of the proposed Project would be located in the existing NESWTF where the risk of wildland fire is considered to be minimal. Construction of the proposed Project would not increase a risk of exposure of structures or persons to wild fires. As a result, no impact would occur.

References

California Department of Toxic Substances Control (DTSC), 2017. DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List). Available: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm. Accessed March 20, 2017.

2.9 Hydrology and Water Quality

Section 4.4 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on hydrology and water quality. The following discussion provides Project-specific information relevant to hydrology and water quality.

Environmental Setting

Water Resources

Surface Water

The City of Fresno extends northward from its historical center over 10 miles to the south bank of the San Joaquin River. A network of small, channelized streams and canals extend throughout the City. As described below, these waterways provide drainage and water conveyance within the City and, through a network of natural and engineered drainages, eventually flow into the San Joaquin River and the Sacramento-San Joaquin Delta (Fresno, 2014).

Groundwater

The proposed Project is located in the Kings Subbasin of the San Joaquin Valley Groundwater Basin. The Subbasin is bounded to the north by the San Joaquin River, to the west by the Delta-Mendota and Westside Subbasins, to the south by the northern boundary of the Empire West Side Irrigation District, the southern fork of the Kings River, the southern boundary of Laguna Irrigation District, and the boundaries of several other water districts. The eastern boundary of the subbasin is the interface between valley sediments and the granitic rock of the Sierra Nevada foothills. The San Joaquin and Kings Rivers are the principal surface waters that are in or along the edge of the subbasin, although many smaller drainages and canals are also present (Fresno, 2014).

Water System Description

During periods of high summer demand, surface water comprises about 15 percent of the City's total water supply, while during lower demand periods (winter), surface water provides over 30 percent of the City's total water supply. The remaining portion of the City's water supply is derived from groundwater, which is supplemented by various recharge efforts, as described in the Metro Plan Update EIR. Water is supplied to the City through a network of water supply wells and distribution mains (Fresno, 2014).

Flooding and Drainage

The Fresno Metropolitan Flood Control District (FMFCD) is the agency responsible for constructing and maintaining the flood and drainage control facilities within the proposed Project alignment. The FMFCD adopted a Stormwater Management Metro Plan that identifies the flood and drainage control needs within its service boundaries. The FMFCD locates and acquires sites for drainage basins based on topography in advance of development (Fresno, 2014).

As defined by the Federal Emergency Management Agency (FEMA), areas located within a 100-year flood zone are those areas that would be subject to flooding during a storm event having a 1 percent annual chance of occurrence.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to hydrology and water quality to be significant if the Metro Plan Update would:

- Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or project area in a manner that would cause substantial erosion and sedimentation and/or flooding onsite or offsite;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place structures within a 100-year flood hazard area which could impede or redirect flood flows; or
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Hydrology and Water Quality		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.4-1	Construction of the proposed project would involve activities that could result in increased amount of sediment and construction equipment-related pollutants in storm water runoff that could adversely affect receiving water quality.	LS	N/A
4.4-2	Implementation of the proposed project would result in increased use of recycled water which could result in the degradation of surface and groundwater quality.	S	LS
4.4-3	Implementation of the proposed project could reduce groundwater recharge potential and lower groundwater levels.	LS	N/A
4.4-4	The proposed project would include the construction of new and upgraded facilities that could increase the rate and amount of runoff, including stormwater runoff that could exceed drainage system capacity.	LS	N/A

Hydrology and Water Quality		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.4-5	Placement of proposed project facilities in a designated flood hazard zone could impede or redirect flood flows resulting in off-site flooding and could expose facilities to damage resulting from flooding.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

The Metro Plan Update did not include the construction of any new housing, and the Metro Plan did not propose the placement of housing within a 100-year flood hazard zone. Therefore, the Metro Plan Update EIR concluded that no impact would occur, and the issue was not evaluated further in the EIR.

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
9.	**HYDROLOGY AND WATER QUALITY — Would the Project:**					
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	☐
c)	Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐	☐
d)	Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐	☐
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	☐
f)	Otherwise substantially degrade water quality?	☐	☐	☒	☐	☐

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
9. HYDROLOGY AND WATER QUALITY — Would the Project:					
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒	☐
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	☐

a,f) **Less than Significant**. Construction of the proposed Project would include activities such as excavation, grading, and trenching that would result in the disturbance of soils and sediments that could be carried into the City's drainage system during storm events. Additionally, accidental discharges of construction fuels, oils, hydraulic fluid, grease, and other hazardous substances could contaminate stormwater flows, resulting in a reduction in stormwater quality onsite or downstream of the Project area. Prior to construction, the City would be required to obtain an NPDES General Construction Permit for Discharges of Stormwater Associated with Construction Activities (NPDES General Stormwater Permit) from the CVRWQCB. Conditions of this permit would include preparation of hazardous material spill control and countermeasure programs; stormwater quality sampling, monitoring, and compliance reporting; development and adherence to a Rain Event Action Plan; monitoring of soil characteristics on site; and preparation of a stormwater pollution prevention plan (SWPPP) that would require implementation of Best Management Practices (BMPs). BMPs may include, but would not be limited to:

- Physical barriers to prevent erosion and sedimentation including setbacks and buffers, rooftop and impervious surface disconnection, rain gardens and cisterns, and other installations;
- Construction and maintenance of sedimentation basins;
- Limitations on construction work during storm events;
- Use of swales, mechanical, or chemical means of stormwater treatment during construction, including vegetated swales, bioretention cells, chemical treatments, and mechanical stormwater filters; and
- Implementation of spill control, sediment control, and pollution control plans and training.

The specific BMPs to be implemented would be determined prior to issuance of the NPDES General Permit, in coordination with the CVRWQCB. Adherence to these BMPs would be required as a condition of the permit, and would substantially reduce or prevent waterborne pollutants from entering natural waters, per CVRWQCB standards. Therefore, this impact would be less than significant.

b) **Less than Significant.** Conversion of natural and other non-paved surfaces to pavement and other impervious surfaces can result in a decrease in the amount of rainwater that can, in some cases, cause a significant reduction in groundwater recharge, resulting in significant impacts to groundwater quantity or quality. The proposed Project would involve construction and installation of the new water storage tank, reconfiguration of the overflow pond, and associated improvements within the existing NESWTF. The proposed Project would result in a minor increase in impervious surfaces over that which currently exists. In addition, adjacent land surfaces would continue to provide infiltration capacity and groundwater recharge. Therefore, no significant change in groundwater infiltration or level is anticipated. As a result, this impact would be less than significant.

c,d,e) **Less than Significant.** During construction of the proposed Project, the natural drainage pattern of the area would be temporarily disrupted, and soils could be subject to accelerated erosion during storm events. However, the Project area is relatively flat and construction activities would not be anticipated to substantially alter the existing drainage pattern in a manner that would result in significant erosion or siltation.

Construction and operation of the proposed Project would not alter the course of any surface water body and would not contribute substantially to an increase in runoff water quantity or quality. No significant construction-related erosion and sedimentation impacts are anticipated, and new impervious surfaces would be limited to the new storage tank. The proposed Project would only result in a minor increase in impervious surfaces over that which currently exist. As a result, this impact would be less than significant.

g,h,i,j) **No Impact.** The proposed Project is not located within a 100-year flood hazard area and would not result in the placement of housing or structures within a 100-year flood hazard area or result in any structures that would impede or redirect flood flows. The Project area is not subject to seiche, tsunami, or mudflow. The proposed Project would not impede or redirect flood flows or otherwise increase the potential for flooding. Therefore, there would be no impact.

References

City of Fresno, 2014. Fresno General Plan. Prepared by City of Fresno Development and Resource Management Department. December 18, 2014.

2.10 Land Use and Land Use Planning

Section 4.2 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, as relevant to land use and land use planning. The following discussion provides Project-specific information relevant to land use and land use planning.

Environmental Setting

The proposed Project is located within the City of Fresno and Fresno County. The City of Fresno is located in Fresno County and in the San Joaquin Valley. The San Joaquin Valley is the southern portion of the Great Central Valley of California. Geographically, the San Joaquin Valley is long and relatively narrow, stretching from the Tehachapi Mountains in the south to the San Joaquin Delta in the north, a distance of nearly 300 miles. The eastern boundary of Fresno County is the Sierra Nevada, which reach elevations of over 14,000 feet, while the western boundary of the County is the lower coastal ranges. Total land area of the San Joaquin Valley is approximately 23,720 square miles.

The City is located in northern Fresno County and primarily east of State Route 99 approximately 170 miles south of the City of Sacramento, and 220 miles northeast of the City of Los Angeles. The Fresno-Clovis metropolitan area, with a current population of 1,002,046, is the second largest metropolitan area in the Central Valley after Sacramento.

The NESWTF had an existing land use designation of open space/agriculture and was changed to a planned land use of water recharge basin – a subset of the public facility designation. Land uses adjacent to the proposed Project consist of residential areas with some open space. The proposed Project would be constructed within the existing NESWTF and would not alter adjacent land uses.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to land use and land use planning to be significant if the Metro Plan Update would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the Fresno General Plan and zoning ordinance) adopted for the purpose of avoiding or mitigating a significant environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan

Metro Plan Update EIR Impacts

The Metro Plan Update EIR concluded that further analysis of the other significance criteria shown above was not warranted because no aspect of the Metro Plan Update EIR would result in the physical dividing of an established community, would not conflict with any applicable land use plan, policy, or regulation, and because there is no adopted Habitat Conservation Plan or Natural Community Conservation Plan that is applicable within the City SOI there would be no impact. For additional discussion, please refer to Section 4.2 of the Metro Plan Update EIR.

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
10.	**LAND USE AND LAND USE PLANNING — Would the Project:**					
a)	Physically divide an established community?	☐	☐	☐	☒	☐
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	☐
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	☐

a) **No Impact.** The proposed Project would involve construction and installation of the new water storage tank, reconfiguration of the overflow pond, and associated improvements within the existing NESWTF. Therefore, the proposed Project would not result in a disruption, physical division, or isolation of existing residential or open space areas. As a result, no impact would occur.

b) **No Impact.** Construction-related activities would be temporary and would not permanently affect existing adjacent land uses. The proposed Project would not result in a change to existing or planned land uses; therefore, there would be no conflicts with land use plans. No impact would occur.

c) **No Impact.** At this time, there are no applicable habitat conservation plans or natural community conservation plans adopted within the City of Fresno or its SOI. Therefore, the proposed Project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. No impact would occur.

2.11 Mineral Resources

The Metro Plan Update EIR concluded that further analysis of the significance criteria shown above was not warranted because no aspect of the Metro Plan Update would result in the removal of important mineral resources, nor would it construct facilities over this resource area, preventing future resource excavation. The following discussion provides Project-specific information relevant to mineral resources.

Environmental Setting

According to the Fresno General Plan, the principal area for mineral resources is located in and immediately adjacent to the General Plan planning area along the San Joaquin River Corridor. These materials are removed via surface mining operations. These areas have been and are proposed to continue to be designated as Open Space, and the activities have been and will continue to require conditional use permits. The City anticipates that these uses will continue until the resources are substantially removed, and it is no longer economically feasible to mine the areas. The proposed Project would be located within the Fresno city limits and a small portion of Fresno County, not located near known mineral resource areas that would be of value to the region.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to mineral resources to be significant if the Metro Plan Update would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

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

Metro Plan Update EIR Impacts

As discussed previously, the Metro Plan Update EIR concluded that further analysis of the significance criteria shown above was not warranted because no aspect of the Metro Plan Update would result in the removal of important mineral resources, nor would it construct facilities over this resource area, preventing future resource excavation. According to the Fresno General Plan (City of Fresno, 2014), most of eastern Fresno County is included in the Fresno Production-Consumption (P-C) Region evaluated by California Department of Conservation (DOC) Division of Mines and Geology. A portion of the San Joaquin River Resource Area is located within the City of Fresno's SOI. Although the Metro Plan Update covers water planning within the City's entire SOI, no proposed Project elements would be located within the San Joaquin River Resource Area and there would be no impact. For additional discussion, please refer to Section 4.3 of the Metro Plan Update EIR.

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
11. MINERAL RESOURCES — Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	☐

a-b) **No Impact.** The proposed Project would not affect any known sand, gravel, natural gas, gold, or silver areas or result in the loss of availability of any known resource. The proposed Project would not remove or conceal important mineral resources from that area, nor would it construct facilities over any mineral resource area, preventing future resource excavation. Therefore, there would be no impact to mineral resources.

References

City of Fresno, 2014. Fresno General Plan. Prepared by City of Fresno Development and Resource Management Department. December 18, 2014.

2.12 Noise

Section 4.8 of the Metro Plan Update EIR addresses the noise related effects of implementing the Metro Plan Update, including the proposed Project. The following discussion provides Project-specific information relevant to noise.

Environmental Setting

Sound is mechanical energy transmitted by pressure waves through a medium such as air, while noise is defined as unwanted sound. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hertz[10] (Hz) and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).[11]

Effects of Noise on People

The effects of noise on people can be placed into three categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning; and
- physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants generally experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so called "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- In carefully controlled laboratory experiments, a change of 1 dB cannot be perceived;
- outside of the laboratory, a 3 dB change is considered a just-perceivable difference when the change in noise is perceived but does not cause a human response;
- A change in level of at least 5 dB is required before any noticeable change in human response would be expected; and

[10] Hertz is a unit of frequency equivalent to one cycle per second
[11] All noise levels reported herein reflect A-weighted decibels unless otherwise stated.

- A 10 dB change is subjectively heard as approximately a doubling in loudness, and can cause adverse response.

The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is non-linear, two noise sources do not combine in a simple additive fashion, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary "point" sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 dB to 7.5 dB per doubling of distance from the source, depending upon environmental conditions (i.e., atmospheric conditions and noise barriers, either vegetative or manufactured, etc.). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles (a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dB per doubling distance from the source (also dependent upon environmental conditions) (Caltrans, 2013). Noise from large construction sites would have characteristics of both "point" and "line" sources, so attenuation would generally range between 4.5 and 7.5 dB per doubling of distance.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration (FTA, 2006). Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration.

Existing Ambient Noise Environment

The noise environment surrounding the Project site is characterized by urban roadways and dense residences. According to Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment*, in areas away from airports, major roads and railroad tracks, ambient noise levels can be established using a relationship of population density (FTA, 2006). Since there have been no ambient noise measurements collected at the Project site, the guidance found in the FTA's *Transit Noise and Vibration Impact Assessment* was used to estimate the baseline ambient noise levels in the vicinity of the Project site. According to the United States Census Bureau, the population density of the City of Fresno is 4,418 people per square mile (U.S. Census Bureau, 2010). Using the guidance provided by the FTA and a 4,418 people per square mile population density, the approximate day-night noise level in the vicinity of the Project site is estimated to be 58 dBA L_{dn}.

Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication; physiological and psychological stress; and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive. Land uses that would be considered sensitive receptors in the vicinity of the proposed Project include single-family residences and Riverview Elementary School. There are single-family residences located approximately 165 feet south of the Project site (across Behymer Avenue) and 260 feet west of the Project site (across Chestnut). Riverview Elementary School is located approximately 165 feet south of the Project site (across Behymer Avenue).

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers a noise related impact to be significant if the Metro Plan Update would:

- Exposure of persons to or generation of noise levels in excess of standards in the City of Fresno Municipal Code, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels existing without the project;
- Exposure of people residing or working in the project area to excessive noise levels, for a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport; or
- Expose people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Noise		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.8-1	Project construction could temporarily increase noise levels at nearby sensitive receptor locations.	S	LS
4.8-2	Project construction could expose persons and structures to ground-borne vibration or ground-borne noise levels.	S	LS
4.8-3	Activities associated with operation of proposed project facilities including treatment facilities and pump stations could increase ambient noise levels.	LS	N/A
4.8-4	Operation of project facilities adjacent to an airport could expose employees to excessive noise levels.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
12. NOISE — Would the Project:					
a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☐	☒
b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☐
c) Result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☒	☐	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☐	☐	☐	☒
e) For a Project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the Project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒	☐
f) For a Project located in the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒	☐

a, d) **Impact Addressed in Metro Plan Update EIR.** Construction activity noise levels at and near the construction areas would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related

material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types of construction equipment generate impulsive noises (such as pile driving), which can be particularly disruptive. Pile driving, however, is not proposed during Project construction. **Table 2.12-1** shows typical noise levels produced by various types of construction equipment.

TABLE 2.12-1
REFERENCE CONSTRUCTION EQUIPMENT NOISE LEVELS
(50 FEET FROM SOURCE)

Type of Equipment	L_{max}, dBA
Backhoe	80
Grader	85
Concrete Mixer Truck	85
Front Loader	80
Pneumatic Tools	85
Air Compressor	80
Excavator	85
Rollers	85
Scrapers	85

SOURCE: FHWA, 2006.

The City of Fresno Municipal Code, Chapter 10, Article 1 establishes noise standards for the Project area as shown in **Table 2.12-2**. A construction noise exemption is included in the Municipal Code Noise Regulations (Chapter 10, Article 1, Section 10-109(a)). The noise regulations state that construction, repair or remodeling work accomplished pursuant to a building, electrical, plumbing, mechanical, or other construction permit issued by the city or other governmental agency, or to site preparation and grading, are exempt provided such work takes place between the hours of 7:00 a.m. and 10:00 p.m. on any day except Sunday.

TABLE 2.12-2
CITY OF FRESNO NOISE STANDARDS

Noise zone	Noise Level (dBA)	Time Period
Residential	50	10 pm to 7 am
Residential	55	7 pm to 10 pm
Residential	60	7 am to 7 pm
Commercial	60	10 pm to 7 am
Commercial	65	7 am to 10 pm
Industrial	70	Any time

SOURCE: City of Fresno Municipal Code, Chapter 10, Article 1 Noise Regulations

During construction, the operation of each piece of off-road equipment within the Project site would not be constant throughout the day, as equipment would be turned off when not in use. Most of the time over a typical work day, the equipment would be operating at different locations within the Project site and would not likely be operating concurrently. However, as a conservative estimate of construction noise levels at the nearest sensitive receptor, it is assumed that the two loudest pieces of construction equipment would be operating at the same time and location within the Project site nearest to the offsite sensitive receptor.

Sensitive receptor land uses in the vicinity of the proposed Project include single-family residences and Riverview Elementary School. There are single-family residences located approximately 165 feet south of the Project site (across Behymer Avenue) and 260 feet west of the Project site (across Chestnut). Riverview Elementary School is located approximately 165 feet south of the Project site (across Behymer Avenue). Using the reference noise levels provided in Table 2.12-1, a backhoe and grader running at the same time and place would generate a maximum noise level of 88 dBA at a distance of 50 feet. **Table 2.12-3** shows the maximum construction noise levels at residences located near each construction area assuming a 7.5 dB drop off rate per doubling of distance.

TABLE 2.12-3
CONSTRUCTION NOISE LEVELS AT EXISTING LAND USES[1]

Sensitive Receptors	Distance to Nearest Sensitive Receptor (feet)	Maximum Noise Level, dBA
Single-family residences located south of the Project area.	165	75
Single-family residences located west of the Project area.	260	70
Riverview Elementary School located south of the Project area.	165	75

NOTES:
1. Assumed backhoe and grader running at the same time.

Source: ESA, 2017; FHWA, 2006

Although construction activities associated with the proposed Project would be temporary in nature and the maximum noise levels discussed above would be short-term, construction activities could occur outside of the City of Fresno's construction except hours. As shown in Table 2.12-3 construction noise levels would exceed the City's noise standard and could temporarily elevate ambient noise levels in and around the Project area. Therefore this impact would result in a potentially significant impact during construction. Implementation of Metro Plan Update EIR **Mitigation Measure 4.8.1** would require specific noise control measures for construction within City limits or within 1,500 feet of sensitive receptors to reduce construction noise impacts to a less-than-significant level.

b) **Less than Significant.** Construction activities may generate perceptible vibration when heavy equipment or impact tools such as jackhammers or compactors are used. The proposed Project would not include the use of any off-road equipment known to generate

a substantial amount of vibration such as pile driving and blasting. According to the FTA's *Transit Noise and Vibration Impact Assessment*, residential land uses exposed to a vibration level of 80 VdB could result in human annoyance and residential buildings exposed to a vibration level of 0.2 PPV (inch/second) could result in building damage (FTA, 2006).

The potential use of bulldozers during fine-site grading would be expected to generate the highest vibration levels during construction. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Large bulldozers typically generate vibration levels of 78 VdB and 0.045 in/sec PPV at a distance of 50 feet, which would below the 80 VdB threshold for human annoyance and the 0.2 PPV (inch/second) threshold for building damage (FTA, 2006). Since there are no sensitive receptors located within 50 feet of the Project site boundary, existing sensitive receptors near the Project site would not be affected by substantial groundborne vibration that would result in annoyance or building damage. This would be a less-than-significant impact.

c) **Less than Significant.** The proposed Project mainly consists of the construction of a 6 MG tank and reconfiguration of the existing overflow spill pond. The new tank will operate similar to the existing tank and would not result in an increase of vehicle trips during operation and maintenance activities. In addition, construction of the Project would not result in new stationary sources of noise such as sirens, air release valves or generators. The proposed Project would not result in the elevation of existing noise levels during operation. Therefore, the proposed Project would not expose nearby sensitive receptors to a substantial permanent increase in ambient noise levels above levels existing without the Project. As a result, this impact would be less than significant.

e, f) **No Impact.** The proposed Project does not involve the development of new noise sensitive land uses, and thus, implementation of the proposed Project would not expose people to excessive aircraft noise. In addition, the proposed Project would not be located within 2 miles of a public airport or private airstrip. As a result, no impacts would occur.

References

California Department of Transportation (Caltrans), 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013.

Federal Transit Administration (FTA), 2006. *Transit Noise and Vibration Impact Assessment*. May 2006.

Federal Highway Administration (FHWA), 2006. *Roadway Construction Noise Model User's Guide*. January 2006.

United States Census Bureau, 2010. Quick Facts Fresno City, California. Available: https://www.census.gov/quickfacts/table/PST045215/0627000. Accessed March 7, 2017.

2.13 Population and Housing

Section 5.2 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on population growth. For additional information, please refer to that section.

Environmental Setting

According to the Fresno General Plan, the principal area for mineral resources is located in and immediately adjacent to the General Plan planning area along the San Joaquin River Corridor. These materials are removed via surface mining operations. These areas have been and are proposed to continue to be designated as Open Space, and the activities have been and will continue to require conditional use permits. The City anticipates that these uses will continue until the resources are substantially removed, and it is no longer economically feasible to mine the areas. The proposed Project would be located within the Fresno city limits and a small portion of Fresno County, not located near known mineral resource areas that would be of value to the region.

Metro Plan Update EIR Standards of Significance

Standard of significance for growth inducement are discussed in detail in Section 5.2 of the Metro Plan Update EIR. Briefly, the analysis considers direct growth inducement, which can be caused by projects that install housing or other facilities that, in and of themselves, cause growth; and indirect growth inducement, which can be caused by the removal of a barrier to growth, such as the removal of water supply or wastewater treatment capacity constraints.

To determine direct growth inducement potential, the Metro Plan Update was evaluated to verify whether an increase in population or employment, or the construction of new housing would occur as a direct result of the Metro Plan Update. To determine indirect growth inducement potential, the proposed project was reviewed to ascertain whether it would remove an obstacle to growth, such as removing a constraint on a required public service. In order to assess this, the Metro Plan Update was reviewed in relation to population projections developed by the City of Fresno Economic Development Division and buildout under the approved Fresno 2025 General Plan. The Metro Plan Update would not directly or indirectly induce growth or remove an obstacle to growth, since the increased population would occur based on the City's approved General Plan and development policies. In 2014, the City of Fresno adopted the Fresno General Plan which has population projections consistent with the 2025 Fresno General Plan. Additionally, the Metro Plan Update was based on projections in the 2025 Fresno General Plan. Implementation of the Metro Plan Update would result in the diversification the City's water supply portfolio, and enhancement of overall water supply reliability to meet the demands of existing and future customers through buildout of the adopted general plan and would not meet a demand greater than what has been approved as part of the Fresno General Plan.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR concluded that the Metro Plan Update would not directly or indirectly induce growth or remove an obstacle to growth, since the increased population would

occur based on the City's approved General Plan and development policies. The treated surface water that would be made available as a result of the proposed Project would not meet a demand greater than what has been approved as part of the Fresno General Plan. Instead, treated surface water would be used to meet projected demand in 2025. For additional discussion, please refer to Section 5.2 of the Metro Plan Update EIR.

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
13. POPULATION AND HOUSING — Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☐	☒
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐

a) **Impact Addressed in Metro Plan Update EIR.** The proposed Project, in and of itself, would not generate new population. However, providing a domestic water supply is one of the primary public services needed to support population growth and development. The proposed Project would develop the infrastructure necessary to provide treated water supply to the City of Fresno through 2025. Although the proposed Project could remove an obstacle to population growth by providing additional water supply and capacity. as discussed in detail in the review of secondary effects of growth in the Metro Plan Update EIR, the significance of potential population growth as it relates to the proposed Project is determined based on whether the proposed Project would or would not be consistent with applicable land use plans. Therefore, the proposed Project would not directly or indirectly induce growth or remove an obstacle to growth, since the increased population would occur based on the City's 2025 General Plan and development policies. The proposed Project is consistent with the Metro Plan Update EIR which was based on projections from the 2025 Fresno General Plan. These projections are within and consistent with the Fresno General Plan. Therefore, the proposed Project is consistent with the Fresno General Plan. Implementation of the proposed Project would result in the diversification the City's water supply portfolio, and enhancement of overall water supply reliability to meet the demands of existing and future customers through buildout of the adopted General Plan and would not meet a demand greater than what has been approved as part of the Fresno General Plan. Therefore, the proposed Project would not result in direct or indirect growth inducement. This impact is considered less than significant.

b,c) **No Impact.** The proposed Project would involve construction and installation of the new water storage tank, reconfiguration of the overflow pond, and associated improvements within the existing NESWTF. It would not displace existing housing or substantial numbers of people since construction would occur within existing NESWTF. No impact would occur.

2.14 Public Services

Section 4.10 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on public services. The following discussion provides Project-specific information relevant to public services.

Environmental Setting

Law Enforcement

The Fresno City Police Department is responsible for providing police protection within the Project area. Services offered to the proposed Project include uniformed patrol response to calls for service, crime prevention, tactical crime enforcement, and traffic enforcement/accident prevention.

Fire Protection and Emergency Medical Services

The Fresno Fire Department offers fire prevention, fire suppression, hazardous material mitigation, rescue, and emergency medical care services within city limits.

Schools

The Fresno County Office of Education School District provides public school education services in the area of the proposed Project. Schools in the vicinity of the proposed Project include Riverview Elementary School, Granite Ridge Intermediate School, Clovis North High School, and Clovis Community College.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to public services to be significant if the Metro Plan Update would:

- Generate need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for any public services (i.e., fire protection, police protection, schools, parks, other public facilities, the construction of which could cause significant environmental impacts).

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Public Services		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.10-1	Implementation of the proposed project could increase demands for public services.	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
14. PUBLIC SERVICES — Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:					
i) Fire protection?	☐	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☐	☒

a) **Impact Addressed in Metro Plan Update EIR.** As described previously and in the Metro Plan Update EIR, the proposed Project would not generate new population growth above existing assumed levels. In addition, the operation and maintenance of the proposed Project will not be labor intensive, therefore, it will not substantially increase the need for the City to hire additional staff to operate and maintain facilities associated with the proposed Project. Thus, the proposed Project would not increase the demand for the kinds of public services that would be needed to support a substantial increase in new residents, such as schools, parks, fire, police, or other public facilities. As a result, this impact would be less than significant.

2.15 Recreation

Section 4.10 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on recreation (as well as public services generally). The following discussion provides proposed Project-specific information relevant to recreation.

Environmental Setting

The City of Fresno Parks and Recreation Department has no parks near the Project area.

Master Plan EIR Standards of Significance and Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Public Services and Utilities/ Service Systems		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.10-1	Implementation of the proposed project could increase demands for public services	LS	N/A

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
15. RECREATION — Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☒	☐	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐

a) **Less than Significant.** Implementation of the proposed Project would involve construction and installation of the new water storage tank, reconfiguration of the overflow pond, and associated improvements within the existing NESWTF. This activity would not cause or result in changes in population within the affected communities, nor would they cause or result in increased demand for recreation, or increased use of

existing recreational facilities. Therefore no deterioration of such facilities would occur as a result of proposed Project implementation. As a result, this impact would be less than significant.

b) **No Impact.** The proposed Project does not include construction of any new recreational facility, and would not otherwise result in the construction of any such facility. Furthermore, the proposed Project would not cause a change local or regional populations or recreation usage patterns. Therefore no expansion of existing facilities, or demand for expanded or new facilities, would occur. No impact would occur.

2.16 Transportation and Traffic

Section 4.6 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on transportation and traffic. The following discussion provides Project-specific information relevant to transportation and traffic.

Environmental Setting

Roadway Network

Regional access to the Project area is provided primarily State Route (SR) 41, SR 99, SR 168, and SR 180. SR 41 is a north-south freeway that connects the City of Fresno northward to Rolling Hills and beyond (to Yosemite National Park), and southward to Easton and beyond (to Morro Bay). In the City of Fresno, SR 41 has six to eight lanes, and access is limited to on- and off-ramps (at SR 99, SR 180, and local roads). SR 99 is a freeway aligned northwest-southeast that connects the City of Fresno northward to Madera and beyond (to Red Bluff) and southward to Kingsburg and beyond (to Bakersfield). In the City of Fresno, SR 99 has six lanes, and access is limited to on- and off-ramps (at SR 41, SR 180, and local roads). SR 168 is a freeway generally aligned northeast-southwest that connects the City of Fresno to Clovis to the northeast. In the City of Fresno, SR 168 has four to six lanes, and access is limited to on- and off-ramps (at SR 180, and local roads). is an east-west roadway of varying character (freeway and non-freeway sections) that connects the City of Fresno eastward to Squaw Valley and beyond (to Kings Canyon National Park) and westward to Kerman and beyond (to Mendota). In the City of Fresno, SR 180 has six to eight lanes, and access is limited to on- and off-ramps (at SR 41, SR 99, SR 168, and local roads). Local access within the Project area is maintained by the City of Fresno and Fresno County.

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to transportation and traffic to be significant if the Metro Plan Update would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that would result in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Transportation and Traffic		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.6-1	Project construction activities would intermittently and temporarily increase traffic congestion due to vehicle trips generated by construction workers and construction vehicles on area roadways.	S	LS
4.6-2	Reduction in the number of, or the available width of, travel lanes on roads where pipeline construction would occur, would result in short-term traffic delays for vehicles traveling past the construction zones.	S	LS
4.6-3	Project construction would potentially cause traffic safety hazards for vehicles, bicyclists, and pedestrians on public roadways.	S	LS
4.6-4	Project construction activities would intermittently and temporarily impede access to local streets or adjacent uses (including access for emergency vehicles), as well as disruption to bicycle/pedestrian access and circulation.	S	LS

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
16. TRANSPORTATION AND TRAFFIC — Would the Project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐	☐

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
16. TRANSPORTATION AND TRAFFIC — Would the Project:					
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒	☐

a, b) **Less than Significant.** Construction activities would intermittently and temporarily generate increases in vehicle trips by construction workers and construction vehicles on area roadways. However, construction activities would occur within the existing NESWTF and would not result in a temporary reduction in the number of, or the available width of, travel lanes on roads. Construction activities would generate short-term increases in vehicle trips by construction workers and construction vehicles on area roadways. Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service (LOS) on any local roadways. The primary off-site impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles. This is a temporary and less-than-significant impact.

c) **No Impact.** The proposed Project would not involve aircraft, nor would the proposed Project structures intrude into aircraft flight paths or air traffic spaces. As a result, no impact would occur.

d) **Impact Addressed in Metro Plan Update EIR.** The proposed Project would not permanently change the existing or planned transportation network in the vicinity of the Project area and would not include the implementation of any new design features that could increase the potential for traffic safety hazards. Because construction trucks carrying construction equipment and materials would share the area roadways with other vehicles, the potential exists for an increase in traffic safety hazards during construction of the proposed Project. Implementation of Metro Plan Update EIR **Mitigation Measure**

4.6.1b would reduce traffic-related safety hazards. As a result, this impact would be reduced to less than significant.

e) **Less than Significant.** The proposed Project would not block or interfere with, temporarily or permanently, any emergency access route. While the proposed Project would result in additional construction related trips, these would be limited in extent and would only occur during the construction period. Therefore, this impact would be less than significant.

f) **No Impact**. The proposed Project does not include the development of alternative forms of transportation, or result in an increase in population that would create conditions that conflict with adopted policies supporting alternative transportation. No impact would occur.

2.17 Utilities and Service Systems

Section 4.10 of the Metro Plan Update EIR addresses the effects of implementing the Metro Plan Update, including the proposed Project, on utilities. The following discussion provides Project-specific information relevant to utilities.

Environmental Setting

Groundwater and Water Facilities

The City of Fresno primarily relies on groundwater to provide most of its water. In mid-2004, the City's NESWTF began operation, which now serves to support delivery of surface water for municipal and industrial uses. During periods of high summer demand, the NESWTF provides about 15 percent of the City's total water supply, while during lower demand periods (winter), the facility provides over 30 percent of the City's total water supply. Water supplied to the NESWTF is derived from the Kings River and San Joaquin River watersheds via a contract with the Central Valley Project. The remaining portion of the City's water supply is derived from groundwater, which is supplemented by various recharge efforts described previously. Water is supplied to the City through a network of water supply wells and distribution mains, such as the transmission mains that would be constructed under the proposed Project.

Surface Water

The City of Fresno extends northward from its historical center over 1 mile to the south bank of the San Joaquin River. A network of small, channelized streams and canals extend throughout the City. These include Dry Creek, Dog Creek, Mill Creek, Herndon Canal, Gould Canal, and Fancher Creek Canal. These waterways provide drainage and water conveyance within the City and, through a network of natural and engineered drainages, eventually flow into the San Joaquin River and the Sacramento-San Joaquin Delta.

Kings River is located on the southern border of Fresno County, about 25 miles south of Fresno; it flows in a south-southwest direction and does not cross through Fresno or its SOI.

Wastewater Collection

Wastewater treatment, collection and disposal in the Project area is provided by the City of Fresno. The City owns and operates the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) near Jensen and Cornelia Aves in southwestern Fresno. The City of Clovis has purchased capacity in the trunk sewers and treatment capacity at the wastewater reclamation facility through a joint powers agreement. The regional collection system primarily uses gravity, but some pumping facilities and lift stations are used in the area based on local topography. Rural residential and agricultural properties in unincorporated areas near the Project area rely on septic tanks and leach fields. Following secondary treatment, wastewater is distributed to a series of infiltration ponds where it is allowed to percolate.

Stormwater

As described in hydrology and water quality discussion above, the FMFCD is the agency responsible for constructing and maintaining the flood and drainage control facilities within the Project area. Please refer to that discussion for more detail.

Solid Waste Disposal

The City of Fresno provides for solid waste pickup from residences and commercial and industrial uses within City limits. The Fresno metropolitan area is served by several landfills including the American Avenue Landfill and the City of Clovis Landfill. The American Avenue Landfill is owned and operated by Fresno County. The City of Clovis Landfill owned and operated by the City of Clovis. Governmental agencies such as school districts, State and local governments, contract with private haulers for the collection of agency, residential, commercial and other solid waste. Private haulers serve the incorporated parcels within the Fresno metropolitan area, as Fresno County does not provide solid waste collection for incorporated areas. The American Avenue Disposal Site had a remaining capacity of 29,358,535 cubic yards in July 2005 and has a ceased operation date of August 2031. The City of Clovis Landfill had a remaining capacity of 7,740,000 cubic yards in August 2012 and has a ceased operations date of April 2047 (CalRecycle, 2017).

Metro Plan Update EIR Standards of Significance

The Metro Plan Update EIR considers an impact to utilities to be significant if the Metro Plan Update would:

- Require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs;
- Violate federal, state, and local statutes and regulations related to solid waste; or
- Result in conflict with other existing utilities, causing interference with their operation or function.

Metro Plan Update EIR Impacts

The Metro Plan Update EIR identifies the impacts shown below that would result from implementation of the Metro Plan Update. Impacts are presented with their corresponding levels of significance before and after application of mitigation measures applied in the Metro Plan Update EIR. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/SMND are presented in **Appendix A**.

Transportation and Traffic		Level of Significance Prior to Mitigation	Level of Significance After Mitigation
4.10-2	The proposed project could generate solid waste that would be disposed of at a landfill without sufficient permitted capacity.	LS	N/A
4.10-3	Implementation of the proposed project could increase water supply and wastewater treatment demand.	LS	N/A
4.10-4	Implementation of the proposed project could increase energy demand.	LS	N/A
4.10-5	Construction of the proposed project could result in temporary interference or disruption of utility service.	S	LS

LS = Less than Significant
S = Significant
SU = Significant Unavoidable
N/A = Not Applicable

Environmental Checklist and Discussion

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Impact Addressed in Metro Plan Update EIR*
17. UTILITIES AND SERVICE SYSTEMS — Would the Project:					
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that would serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	☐

a, e) **Less than Significant.** The proposed Project would result in a minimal increase in wastewater treatment over current conditions because the proposed Project would increase the amount of treated water available. However, the proposed Project would only allow the NESWTF to operate at capacity and would not increase the capacity of the facility over what was already planned. Given that the proposed Project would not significantly increase wastewater generation, it would not be anticipated to exceed existing RWRF capacity. As a result, this impact would be less than significant.

b) **No Impact.** The proposed Project entails the construction and installation of the new water storage tank, reconfiguration of the overflow pond, and associated improvements within the existing NESWTF. The proposed Project would meet the water quality requirements, customer demands, and reduce the use of groundwater, by maximizing the use of the NESWTF. The proposed Project would not require new or expanded water supply resources or entitlements. As a result, no impact would occur.

c) **No Impact.** The proposed Project would not require construction of a new storm drainage system or expansion of an existing stormwater drainage facility. As a result, no impact would occur.

d) **No Impact.** The proposed Project would not involve development of new residential, commercial or industrial land uses; therefore, the proposed Project would not directly or indirectly result in population growth or development that would require additional water supply or wastewater treatment demand. The Metro Plan Update EIR anticipates growth in the area and planned for this water facility to accommodate that growth. As a result, no impact would occur.

f, g) **Less than Significant.** Proposed Project construction activities would generate solid waste related to excess construction materials and material removed during site clearing. Excess dirt not used to backfill pipeline trenches would be hauled to City properties or used onsite, and not diverted to landfills. The quantity of solid waste is expected to be minimal and is not anticipated to affect the capacity of the local landfills. The Fresno metropolitan area is served by several landfills including the American Avenue Disposal Site and the City of Clovis Landfill. Both of these facilities have permitted capacity. Solid waste generated by the construction of the proposed Project would be disposed of at one of the regional facilities with permitted capacity located in or around Fresno County. In addition, solid waste would be managed consistent with the requirements of AB 939 and the City's recycling ordinance; therefore, the proposed Project would not exceed landfill capacity or violate any applicable solid waste statutes or regulations. As a result, this impact would be less than significant.

References

CalRecycle, 2017. Facility/Site Summary Details. Available: http://www.calrecycle.ca.gov/SWFacilities/Directory/10-AA-0004/Detail/. Accessed March 16, 2017.

2.18 Environmental Justice

The U.S. Census uses a set of income limits that vary by family size and composition to determine who is in poverty. If a family's total income is less than the income limit, then that family, and every individual in it, is considered to be in poverty. Poverty income level thresholds are nationwide standards set by the Census. The formula for the poverty rate is the number of persons below the poverty level divided by the number of persons for whom poverty status is determined.

For the period 2011-2015, 26.8 percent of the population in Fresno was living in poverty compared to 16.3 percent for the state of California as a whole. The median household income for the period 2011-2015 for Fresno was $45,233, compared to the median California income of $61,818. Per capita personal income (in 2015 dollars) for Fresno was $19,465, below the State average of $30,318 (U.S. Census Bureau, 2017).

The 2010 population estimate for Fresno showed that the majority of the population (approximately 49.6 percent) consisted of white individuals. The largest minority population in the City is Hispanic or Latino. The 2010 estimate showed that the Hispanic or Latino (of any race) population was 46.9 percent of the total, compared to 37.6 percent in California as a whole. The Asian population constitutes the next largest minority group. In 2010, Asians constituted 12.6 percent of the total City population, compared to 13.0 percent for California as a whole. The percentage of Black or African American residents in the City was 8.3 percent of the total, compared to 6.2 percent in California as a whole. The percentage of American Indian and Alaska Native residents in the City was 1.7 percent, compared to 1.0 percent in California as a whole. The percentage of Native Hawaiian and Other Pacific Islander in the City was 0.2 percent, compared to 0.4 percent in California as a whole (U.S. Census Bureau, 2017).

According to Council on Environmental Quality (CEQ) and Environmental Protection Agency (EPA) guidelines established to assist federal agencies for developing strategies to examine environmental justice, the first step in conducting an environmental justice analysis is to define minority and low-income populations. Based on these guidelines, a minority population is present in a project study area if: (a) the minority population of the affected area exceeds 50 percent; or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. By the same rule, a low-income population exists if the project study area is composed of 50 percent or more people living below the poverty threshold, as defined by the U.S. Census Bureau, or is significantly greater than the poverty percentage of the general population or other appropriate unit of geographic analysis. The second step of an environmental justice analysis requires the evaluation of "high" and "adverse" impacts. The CEQ guidance indicates that when determining whether the effects are high and adverse, agencies are to consider whether the risks or rates of impact "are significant (as employed by the National Environmental Policy Act [NEPA]) or above generally accepted norms." The final step requires determining whether the impact on the minority or low-income population is disproportionately high and adverse. Although none of the published guidelines define the term "disproportionately high and adverse," CEQ includes a non-quantitative definition stating that an effect is disproportionate if it

appreciably exceeds the risk or rate to the general population. As part of this analysis, poverty levels and minority population levels were examined for Fresno.

To prove a violation of federal environmental justice principles, the government must demonstrate that the proposed federal action or action alternatives under consideration would cause disproportionately high and adverse human health or environmental impacts on a minority population, low-income population, or Native American tribe either directly, indirectly, or cumulatively. To make a finding that disproportionately high and adverse effects would likely fall on a minority or low-income population, three conditions must be met simultaneously: (1) there must be a minority or low-income population in the impact zone; (2) a high and adverse impact must exist; and (3) the impact must be disproportionately high and adverse on the minority or low-income population. The project area (Fresno) does not have a minority or low-income population that exceeds 50 percent. There is no evidence to suggest that the proposed Project would cause a disproportionately high adverse human health or environmental effect on minority and low-income populations compared to other residents of the Project area. Potential impacts to which could impact off-site areas and residents are discussed in the various section of this document (e.g. water quality, air quality, hazardous materials, transportation and noise). As the Project area does not have an identified community of concern or a disproportionately high adverse effect on communities of concern, this impact is considered less than significant.

References

United States Census Bureau, 2017. American Fact Finder: Community Facts. Available: https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml. Accessed March 20, 2017.

2.19 Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) **Less than Significant with Mitigation.** As discussed the Air Quality; Biological Resources; Cultural Resources; Geology, Soils, and Seismicity; Hazards and Hazardous Materials; Noise; and the Transportation and Traffic sections of this IS/SMND, the proposed Project would result in potentially significant temporary impacts. However, adoption and implementation of mitigation measures described in this IS/SMND would reduce these individual impacts to less-than-significant levels.

b) **Less than Significant with Mitigation.** Potential cumulative scenario impacts of the proposed Project are evaluated in Chapter 5 of the Metro Plan Update EIR, and throughout the impact analysis presented in Chapter 4 of the Metro Plan Update EIR. Briefly, and as relevant to this specific proposed Project, the geographic scope of the area potentially affected by cumulative biological resources impacts includes the City of Fresno and the southern Central Valley. Construction of current and future projects in the City of Fresno and southern Central Valley would include earth disturbing activities that could contribute to the progressive loss or degradation of habitat or species protected under federal, state and local regulations. This could result in significant cumulative impacts to protected wildlife and plant species. The proposed Project would involve earth-disturbing activities during construction of facilities which would cumulatively contribute to this significant cumulative impact. Implementation of mitigation measures identified in the environmental assessment sections above would reduce potential cumulative effects to less than significant. No mitigation beyond the measures provided in the discussion of each environmental topic are needed to reduce proposed Project impacts to less than significant.

c) **Less than Significant with Mitigation.** The construction and operation of the proposed Project have the potential to result in adverse effects to human beings, including impacts related to air emissions, noise, and exposure to hazardous materials. Potential direct and indirect Project impacts were examined in the analysis provided above, and mitigation provided to reduce impacts to less than significant levels. No mitigation beyond the measures provided in the discussion of each environmental topic are needed to reduce proposed Project impacts to less than significant.

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CHAPTER 3
Responses to Comments

3.1 Introduction

This chapter includes copies of the comment letters received during the public review period of the City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project Supplemental MND and responses to all of the substantive comments during the public review period from April 21, 2017 through May 20, 2017.

3.2 List of Comment Letters Received

The comment letters received on the Draft IS/MND are listed below in **Table 3-1**. Each comment letter has been assigned a corresponding alphabet letter designation.

TABLE 3-1
LIST OF COMMENTERS

Letter	Commenter	Received Date
A	Governor's Office of Planning and Research, State Clearing House and Planning Unit	May 30, 2017

The Governor's Office of Planning and Research sent a letter stating that the comment period closed with no state agencies submitting comments and acknowledging compliance with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Edmund G. Brown Jr.
Governor

Ken Alex
Director

May 23, 2017

Douglas Hahn
City of Fresno
2101 G St
Fresno, CA 93706

Subject: City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project
SCH#: 2017041061

Dear Douglas Hahn:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. The review period closed on May 22, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2017041061
Project Title City of Fresno Northeast Surface Water Treatment Facility Storage Tank Project
Lead Agency Fresno, City of

Type MND Mitigated Negative Declaration

Description In order to meet the water quality requirements, customer demands, and reduce the use of groundwater, the city proposes to install a new 6MG water storage tank to provide a total of 7.5 MG of storage capacity at the Northeast Surface Water Treatment Facility. The new 6 MG tank will be located on the south side of the NESWTF, where the overflow spill pond is currently located. The circular tank will be approx 230 ft in diameter and be approx 24-ft in height. The existing over flow/spill pond will be reconfigured to allow space for the new tank. The tank will be a pre-stressed concrete structure that is buried approx 20 ft below ground with only the top four feet exposed above ground level. Construction of the tank will require excavation to a depth of approx 23 ft to install the foundation. Piping inlet and outlets will be installed on the bottom of the tank, requiring some limited excavations as deep as 30 ft to place these pipes.

Lead Agency Contact

Name Douglas Hahn
Agency City of Fresno
Phone (559) 621-1607 **Fax**
email
Address 2101 G St
City Fresno **State** CA **Zip** 93706

Project Location

County Fresno
City Fresno
Region
Lat / Long
Cross Streets North Chestnut Ave and East Behymer Ave
Parcel No. 57802006T
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways Enterprise Canal
Schools
Land Use public facility - water recharge basin

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Other Issues; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 4; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Caltrans, District 6; State Water Resources Control Board, Divison of Financial Assistance; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Fresno); Native American Heritage Commission; State Lands Commission

Document Details Report
State Clearinghouse Data Base

Date Received	04/21/2017	***Start of Review***	04/21/2017	***End of Review***	05/22/2017

Appendix A

Metro Plan Update Mitigation Monitoring and Reporting Program

APPENDIX A
Mitigation Monitoring and Reporting Program

The Metro Plan Update EIR identified impacts, that would result from implementation of the Metro Plan Update. Mitigation measures adopted under the Metro Plan Update EIR and incorporated into this IS/MND are presented in **Appendix A**.

Public Resources Code Section 21081.6, subdivision (a)(1) requires lead agencies to, "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation". This Mitigation Monitoring and Reporting Program (MMRP) identifies mitigation measures adopted by the City of Fresno (City) from the Fresno Metropolitan Water Resources Management Plan Update (proposed project or Metro Plan Update) Environmental Impact Report (EIR); responsibility for implementation of the mitigation measures; actions taken to monitor and report on implementation; and timing of action. Mitigation measures are numbered consistent with the numbering included in the Metro Plan Update EIR (State Clearinghouse No. 2013091021), as updated by responses to comments included in the Metro Plan Update Final EIR.

The MMRP table includes the following:

Mitigation Measures – adopted mitigation measures from the Draft EIR.

Implementation and Reporting Responsibility – this column identifies who is responsible for implementing, enforcing and monitoring the actions described in the mitigation measures.

Monitoring and Reporting Actions – describes the actions taken to monitor and report implementation of the mitigation requirements.

Implementation Schedule – identifies the timing of implementation of the mitigation requirements.

Verification of Compliance – a column for the identification of the party responsible for monitoring implementation of the mitigation measures to note completion.

Abbreviations used in the MMRP include:

- Building and Safety Services – City of Fresno Development and Resources Management Building and Safety Services Division
- CDFW – California Department of Fish and Wildlife

- DARM – City of Fresno Development and Resources Management
- DPU – City of Fresno Department of Public Utilities
- Historic Preservation – DARM Historic Preservation Division
- DPW – City of Fresno Department of Public Works
- SJVAPCD – San Joaquin Valley Air Pollution Control District
- Traffic Engineering – DPW Traffic Engineering Division
- USFWS – United States Fish and Wildlife Service

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Geology and Soils					
Measure 4.3.1a (NT/F): The City shall prepare a site-specific soil and geotechnical engineering study prior to final design of individual projects under the Metro Plan Update. Each study shall be performed by a licensed professional including, but not limited to, a geologist, engineering geologist, certified soil scientist, certified agronomist, registered agricultural engineer, registered civil or structural engineer, and/or certified professional erosion and sediment control specialist with expertise in geotechnical engineering issues who is registered and/or certified in the State of California, to determine site specific impacts and to recommend site specific mitigations. The site-specific soil and geotechnical engineering studies shall be submitted to all appropriate State and local regulatory agencies including, but not limited to, City of Fresno's Building and Safety Services Division for review and approval. All feasible recommendations addressing potential seismic hazards and soil constraints shall be implemented.	Water Division	Building and Safety Services	Confirm that a site-specific soils and geotechnical engineering study is performed for individual projects by a licensed professional prior to final design approval. Confirm that the site specific soil and geotechnical are submitted to all appropriate State and local regulatory agencies. Confirm that all feasible recommendations addressing potential seismic hazards and soil constraints are implemented.	Prior to final design approval	
Measure 4.3.1b (NT/F): All buildings shall conform to CBC standards for seismicity, engineered slope stability, and erosion control, as relevant.	Water Division	Building and Safety Services	Confirm that all buildings conform to the California Building Code standards for seismicity, engineered slope stability, and erosion control as relevant.	Prior to final design approval	
Measure 4.3.1c (NT/F): All pipelines shall be designed and installed consistent with the guidelines published by the American Water Works Association.	Water Division	Building and Safety Services	Confirm that all pipelines are designed and installed consistent with American Water Works Association guidelines.	Prior to final design approval On-going: construction	
Biological Resources					
Measure 4.5.1a (NT/F): Pre-construction surveys for burrowing owls shall be conducted at any proposed project site containing suitable habitat by a qualified biologist [as approved by CDFW] within 30-days prior to the start of work activities where land construction is planned in known or suitable habitat for burrowing owls. If construction activities are delayed for more than 30 days after the initial preconstruction surveys, then a new preconstruction survey shall be required. All surveys shall be conducted in accordance with survey protocols from Appendix C and D of the *Staff Report on Burrowing Owl Mitigation* (CDFG, 2012).	Water Division	DARM CDFW	Confirm completion of pre-construction surveys for burrowing owls shall by a qualified biologist within 30-days prior to the start of work activities where land construction is planned in known or suitable habitat for burrowing owls. Confirm a new preconstruction survey is completed if construction activities are delayed for more than 30 days after the initial preconstruction surveys.	Prior to construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Measure 4.5.1b (NT/F): If burrowing owls are discovered in the proposed project site vicinity during construction, the onsite biologist shall be notified immediately. Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If this criteria is not met, occupied burrows during the nesting season will be avoided by establishment of a no-work buffer of 250-foot around the occupied/active burrow. Where maintenance of a 250-foot no-work buffer zone is not practical, the project applicant shall consult with the CDFW to determine appropriate avoidance measures. Burrows occupied during the breeding season (February 1 to August 31) will be closely monitored by the biologist until the young fledge/leave the nest. The onsite biologist shall have the authority to stop work if it is determined that construction related activities are disturbing the owls. If criterion 1 or 2 above are met and as approved by CDFW, the biologist shall undertake passive relocation techniques by installing one-way doors in active and suitable burrows allowing owls to escape but not re-enter. Owls should be excluded from the immediate impact zone and within a 160-foot buffer zone by having one-way doors placed over the entrance to prevent owls from inhabiting those burrows. Outside of the nesting season (August 31 through January 31st), passive relocation techniques shall take place. Construction activities may occur once a qualified biologist has deemed the burrows are unoccupied.	Water Division	DARM Water Division CDFW	Confirm that the onsite biologist is notified immediately if burrowing owls are discovered in the proposed project site vicinity during construction. Confirm that occupied burrows are not disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.	On-going: construction	
Measure 4.5.1c (NT/F): Prior to initiating construction activities at any proposed project site containing suitable habitat, a qualified biologist shall conduct a pre-construction survey for horned lark, Swainson's hawk, raptors, and other protected and migratory bird species. The survey shall be conducted to identify any active nests located within the construction area or up to 0.5 mile from the construction area. In addition, all trees slated for removal shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree. If possible, trees slated for removal shall be removed starting September 1st through the end of February, outside of the nesting season.	Water Division	DARM Water Division CDFW	Confirm completion of pre-construction surveys by a qualified biologist. Confirm that if active nests are found during the survey that the appropriate mitigation measures are implemented, including a no-work buffer approved by CDFG. Confirm that the results of the survey are documented in a letter report that is distributed to CDFG and the City of Fresno.	Prior to construction On-going: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
If active nests are found during the survey, the applicant shall implement appropriate mitigation measures to ensure that the species will not be adversely affected, which will include establishing a no-work buffer zone as, approved by California Department of Fish and Wildlife (CDFW), around the active nest. The no-work buffer may vary depending on species and site specific conditions as approved by CDFW. Appropriate mitigation measures include delaying construction activities until a qualified biologist determines that juveniles have fledged the nest(s), or establishing a "no construction" zone buffer around the nest. The results of the survey shall be documented in a letter report that is distributed to the CDFW and the City of Fresno. These measures shall ensure compliance with the Migratory Bird Treaty Act and Fish and Game Code 3503.5.					
Measure 4.5.3 (NT/F): No more than two weeks prior to the commencement of ground-disturbing activities a qualified biologist shall perform surveys for western pond turtle within suitable aquatic and upland habitat on the project site. Surveys shall include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits or approvals) shall temporarily move any identified western pond turtles upstream of the construction site, and temporary barriers shall be placed around the construction site to prevent ingress. Construction shall not proceed until the work area is determined to be free of turtles and their nests. The biologist will be responsible for moving adult turtles that enter the construction zone after construction has begun. If a nest is located within a work area, the biologist [with the appropriate permits or approvals from the California Department of Fish and Wildlife (CDFW)] may move the eggs to a suitable facility for incubation, and release hatchlings into the original habitat in late fall. The biologist shall be present on the project site during initial ground clearing and grading and during all other construction activities adjacent to drainages with the potential to support western pond turtle. The results of these surveys shall be documented in a technical memorandum that shall be submitted to the CDFW (if turtles are documented) and/or the City.	Water Division	DARM Water Division USFWS	Confirm that a qualified biologist conducts western pond turtle surveys within creeks and in other ponded areas affected by the project. Confirm that upland areas are also examined for evidence of nests as well as individual turtles. Confirm that construction shall not proceed until a reasonable effort has been made to capture and relocate as many western pond turtles as possible to minimize take. Confirm that if a nest is observed, a biologist with the appropriate permits and prior approval from CDFG shall move eggs to a suitable location or facility for incubation, and release hatchlings into the creek system the following autumn.	Prior to construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Measure 4.5.4a (NT/F): To ensure that impacts to the San Joaquin kit fox and its habitat are avoided or reduced, the following measures shall be implemented: Preconstruction surveys for the San Joaquin kit fox shall be conducted no less than two calendar weeks and no more than thirty calendar days prior to commencement of ground disturbance. Surveys shall be conducted by qualified biologists. When surveys identify potential dens (defined as burrows at least four inches in diameter which open up within two feet), potential den entrances shall be dusted for three calendar days to register and track activity of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, the den may be destroyed. If San Joaquin kit fox activity is identified, then dens shall be monitored for at least five consecutive days from the time of observation to determine if occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). If the den is occupied by an adult only, it may be destroyed when the adult fox has moved or is temporarily absent. If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den and as approved by the USFWS. This buffer zone will be maintained until the biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the U.S. Fish and Wildlife Service's published *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS, 199b) shall apply (except that preconstruction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the kit fox, keeping heavy equipment operating at safe speeds, checking construction pipes for kit fox occupation during construction and similar low or no-cost activities.	Water Division	DARM USFWS	Confirm that preconstruction surveys for the San Joaquin kit fox are conducted by a qualified biologist no less than two calendar weeks and no more than thirty calendar days prior to commencement of ground disturbance. Confirm that when surveys identify potential dens, potential den entrances are dusted for three calendar days to register and track activity of any San Joaquin kit fox present. Confirm that if San Joaquin kit fox activity is identified that dens are monitored for at least five consecutive days from the time of observation to determine if occupation is by an adult fox only or is a natal den. Confirm that If the den is a natal den, a buffer zone of 250 feet is maintained around the den as approved by the USFWS. Confirm that the buffer zone is maintained until the biologist determines that the den has been vacated. Confirm that is and where San Joaquin kit fox are identified, the provisions of the USFWS's published	Prior to construction On-going: construction	
Measure 4.5.4b (NT/F): All excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth-full or wooden planks.	Contractor	Building and Safety Services	Confirm that all excavated, steep-walled holes or trenches more than two feet deep are covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth-full or wooden planks.	On-going: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Measure 4.5.5 (NT/F): To ensure that impacts to the American badger and their habitat are avoided or reduced, the following measures shall be implemented: • A qualified biologist shall conduct a training session for all construction personnel focused on the protection and conservation of protected, non-listed special-status wildlife species, including American badgers. At a minimum, the training shall include a species and habitat description for the American badger (in addition to other non-listed special-status species). The training session shall identify the general measures that are being implemented to minimize impacts on these species as they relate to the project, and the boundaries within which the project could be accomplished. • Concurrent with other required surveys, during winter/spring months before new project activities, and concurrent with other preconstruction surveys (e.g., kit fox and burrowing owl), a qualified biologist shall perform a pre-activity survey to identify the presence of American badgers. If this species is not found, no further mitigation shall be required. If badgers are identified, they shall be passively relocated using burrow exclusion (e.g., installing one-way doors on burrows) or similar CDFW-approved exclusion methods. In unique situations it might be necessary to actively relocate badgers (e.g., using live traps) to protect individuals from potentially harmful situations. Such relocation could be performed with advance CDFW coordination and concurrence. When unoccupied dens are encountered outside of work areas but within 100 feet of proposed activities, vacated dens shall be inspected to ensure they are empty and temporarily covered using plywood sheets or similar materials. • If badger occupancy is determined at a given site within the work area, the construction manager should be informed that work should be halted. Depending on the den type, reasonable and prudent measures to avoid harming badgers will be implemented and may include seasonal limitations on project construction near the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence. • To minimize the possibility of inadvertent badger mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads.	Water Division Contractor	DARM CDFW USFWS	Confirm that a qualified biologist conducts a training session for all construction personnel. Confirm that a qualified biologist performs a pre-activity survey during winter/ spring months before new project activities, and concurrent with other preconstruction surveys to identify the presence of American badgers. Confirm that If badgers are identified, they shall be passively relocated using burrow exclusion or similar CDFW-approved exclusion methods. Confirm that when unoccupied dens are encountered outside of work areas but within 100 feet of proposed activities, vacated dens are inspected to ensure they are empty and temporarily covered using plywood sheets or similar materials. Confirm that if badger occupancy is determined at a given site within the work area, the construction manager is informed that work should be halted. Confirm that, depending on the den type, reasonable and prudent measures to avoid harming badgers are implemented. Confirm that project-related vehicles observe a maximum 20 miles per hour speed limit on private roads. Confirm that all excavated holes or trenches greater than 2 feet deep are covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Confirm that before filling, such holes are thoroughly inspected for trapped animals. Confirm that no pets are allowed in the project area.	Prior to construction On-going: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
• To prevent accidental entrapment of badgers or other animals during construction, all excavated holes or trenches greater than 2 feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. • All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area. • To prevent harassment and mortality of badgers or destruction of their dens, no pets shall be allowed in the project area.					
Transportation and Traffic					
Measure 4.6.1b (NT/F): The following requirements shall be incorporated into contract specifications prepared by the City for the project: • The contractor(s) will obtain any necessary road encroachment permits prior to construction and will comply with conditions of approval attached to project implementation. As part of the road encroachment permit process, the contractor(s) will submit a traffic safety / traffic management plan (for work in the public right-of-way) to the agencies having jurisdiction over the affected roads. Elements of the plan will likely include, but are not necessarily limited to, the following: • Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. Use flaggers and/or signage to guide vehicles through and/or around the construction zone. • Control and monitor construction vehicle movements through the enforcement of standard construction specifications by periodic onsite inspections. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours. • Limit lane closures during peak hours to the extent possible. Delays would also be experienced by drivers during off-peak hours, but because of the lower volume, fewer people would be affected by the delays during those periods. Restore roads and streets to normal operation by covering trenches with steel plates outside of allowed working hours or when work is not in progress.	Water Division Contractors	DARM Traffic Engineering	Confirm the obtainment of any necessary road encroachment permits. Confirm the development and implementation of a traffic safety/traffic management plan for.	Prior to construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Limit, where possible, the pipeline construction work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone. Parking may be prohibited if necessary to facilitate construction activities or traffic movement. If the work zone width will not allow a 10-foot-wide paved travel lane, then the road will be closed to through-traffic (except emergency vehicles) and detour signing on alternative access streets will be used. • Include signage to direct pedestrians and bicyclists around project construction work zones that displace sidewalks and/or bike lanes. • Store all equipment and materials in designated contractor staging areas on or adjacent to the worksite, in such a manner to minimize obstruction to traffic. • Comply with roadside safety protocols. Provide “Road Work Ahead” warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. • Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures. • Coordinate construction activities, to extent possible, to minimize traffic disturbances adjacent to schools (e.g., do work during summer months when there is less activity at schools). For construction activities that occur during the school year, then at the start and end of the school day at schools adjacent to a pipeline project, the contractor(s) will provide flaggers in the school areas to ensure traffic and pedestrian safety. • Coordinate with the Fresno Area Express so the transit provider can temporarily relocate bus routes or bus stops in work zones as it deems necessary. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule construction of project elements to avoid overlapping maximum trip-generation construction phases.					

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Air Quality and Climate Change					
Measure 4.7.1a (NT/F): The City of Fresno shall comply with Regulation VIII Rule 8011 and implement the following dust control measures during all future project construction: • The City of Fresno shall submit a Dust Control Plan subject to review and approval of the San Joaquin Valley Air Pollution Control District (SJVAPCD) at least 30 days prior to the start of any construction activity on a site that includes 40 acres or more of disturbed surface area. Specific control measures for construction, excavation, extraction, and other earthmoving activities required by the SJVAPCD include: All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover in order to comply with Regulation VIII's 20 percent opacity limitation. • All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water (at least two times per day) or by presoaking. • When materials are transported offsite, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. However, the use of blower devices is expressly forbidden, and the use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. • Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.	Water Division Contractor	Building and Safety Services SJVAPCD	Confirm compliance with Regulation VIII Rule 8011 and submit a Dust Control Plan subject to review and approval of the SJVAPCD at least 30 days prior to the start of any construction activity on a site that includes 40 acres or more of disturbed surface area. Confirm the implementation of specific control measures for construction, excavation, extraction, and other earthmoving activities as required by the SJVAPCD. Confirm the implementation of enhanced and additional control measures for construction emissions of PM_{10} where feasible.	Prior to construction Ongoing: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
• Any site with 150 or more vehicle trips per day shall prevent carryout and trackout. Enhanced and additional control measures for construction emissions of PM10 shall be implemented where feasible. These measures include: • Limit traffic speeds on unpaved roads to 15 miles per hour (mph). • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. • Install wind breaks at windward side(s) of construction areas. • Suspend excavation and grading activity when winds exceed 20 mph. • Limit area subject to excavation, grading, and other construction activity at any one time.					
Measure 4.7.1b: Implementation Plans prepared by the City of Fresno for this project shall comply with Rule 9510 Indirect Source Review. Compliance with Rule 9510 would require reductions of 20% of the nitrogen oxide (NO_x) construction emissions and 45% of the PM_{10} construction exhaust emissions. If these emission reductions are not met, then the City of Fresno shall pay the required mitigation fees by the SJVAPCD.	Water Division Contractor	Building and Safety Services	Confirm that Implementation Plans prepared by the City comply with Rule 9510 Indirect Source Review. Confirm reductions of 20% of the nitrogen oxide (NO_x) construction emissions and 45% of the PM_{10} construction exhaust emissions or payment of the required mitigation fees if the emissions reductions are not met.	Prior to construction	
Measure 4.7.1c: Off-road construction equipment used on site shall achieve fleet average emissions equal to or less than the Tier II emissions standard of 4.8 NO_x grams per horsepower per hour (g/hp-hr).	Water Division Contractor	Building and Safety Services	Confirm that off-road construction equipment used on site achieves fleet average emissions equal to or less than the Tier II emissions standard.	Ongoing: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Noise					
Measure 4.8.1 (NT/F): The City and its contractors shall implement the following mitigation measures when project-related construction in the City is planned to occur within 1,500 feet of sensitive receptors: • Sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors, to include any of the applicable mitigation measures listed below. • Construction activities shall be conducted in compliance with Article 1- Noise Regulations, Section 10-110 of the City municipal code • Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. • Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby sensitive receptors including residences, schools, and hospitals. • If construction were to occur near a school, the construction contractor shall coordinate with the most noise producing construction activities with school administration in order to limit disturbance to the campus. • Signs shall be posted at constructions sites that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number in the event of problems. • An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.	Water Division Contractor	Building and Safety Services	Confirm that sensitive receptors within 1,500 feet of project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors. Confirm that construction activities meet municipal code requirements related to noise. Confirm construction equipment noise is minimized. Confirm that construction contractors locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby sensitive receptors. Confirm that if construction were to occur near a school, the construction contractor coordinates with the most noise producing construction activities with school administration in order to limit disturbance to the campus.	Prior to construction On-going: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Cultural Resources					
Measure 4.12.2b (NT/F): Prior to construction a worker training program shall be implemented to inform all personnel involved with earthmoving activities the potential for prehistoric and historic-period subsurface archaeological resources to be uncovered and/or disturbed by proposed project-related earth moving; where such remains are most likely to be encountered during earth moving; and procedures to be employed if archaeological resources are discovered during excavations.	Water Division	Historic Preservation	Confirm that a worker training program is implemented prior to construction to inform all personnel involved with earthmoving activities the potential for prehistoric and historic-period subsurface archaeological resources to be uncovered.	Prior to construction On-going: construction	
Measure 4.12.2c (NT/F): During construction, should prehistoric or historic-period subsurface cultural resources be discovered, all activity in the vicinity of the find shall stop and a Secretary of the Interior qualified archaeologist will be contacted to assess the significance of the find according to *CEQA Guidelines* Section 15064.5. If any find is determined to be significant, the proposed project proponent and the archaeologist will determine, in consultation with local Native American groups, appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered may be, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups, subject to scientific analysis, professional museum duration, and documentation according to current professional standards.	Water Division	Historic Preservation	Confirm that during construction, if prehistoric or historic-period subsurface cultural resources are discovered, that all activity in the vicinity of the find is stopped and a qualified archaeologist is contacted to assess the significance of the find according to *CEQA Guidelines* Section 15064.5. Confirm that if any find is determined to be significant, the proposed project proponent and the archaeologist determine, in consultation with local Native American groups, appropriate avoidance measures or other appropriate mitigation. Confirm that all significant cultural materials recovered are, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups, subject to scientific analysis, professional museum duration, and documentation according to current professional standards.	On-going: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Measure 4.12.3: If human skeletal remains are uncovered during proposed project construction, work in the vicinity of the find shall cease and the Fresno County coroner will be contacted to evaluate the remains, following the procedures and protocols set forth in Section 15064.5 (e)(1) of the *CEQA Guidelines*. If the County coroner determines that the remains are Native American, the City of Fresno will contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641) and the Most Likely Descendant will be identified. The Most Likely Descendant will make recommendations for the treatment of any human remains.	Water Division	Historic Preservation	Confirm that if human skeletal remains are uncovered during proposed project construction, work in the vicinity of the find is stopped and the Fresno County coroner is contacted to evaluate the remains, following the procedures and protocols set forth in Section 15064.5 (e)(1) of the *CEQA Guidelines*. Confirm that if the County coroner determines that the remains are Native American, Native American Heritage Commission is contacted, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641) and the Most Likely Descendant is identified. Confirm that the Most Likely Descendant has made recommendations for the treatment of any human remains.	On-going: construction	
Measure 4.12.4a (NT/F): If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all ground disturbing activities within 50 feet of the find shall be halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in consultation with the City of Fresno and in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).	Water Division	Historic Preservation	Confirm that If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all ground disturbing activities within 50 feet of the find are halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in consultation with the City of Fresno and in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).	On-going: construction	

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing	Verification of Compliance
Measure 4.12.4b (NT/F): Prior to all Metro Plan facilities involving excavations greater than 6 feet in depth (including pipeline crossings and groundwater recharge basins), the City of Fresno shall retain a qualified paleontologist to design a monitoring and mitigation program. The paleontological resource monitoring and mitigation program should include: • A worker training program to inform all personnel involved with earthmoving activities the potential for fossil remains being uncovered and/or disturbed by proposed project-related earth moving; where such remains are most likely to be encountered during earth moving; and procedures to be employed if fossil remains are discovered during excavations. • Preconstruction coordination with appropriate agencies, and identification of an institution willing and able to accept fossil specimens collected during the mitigation program. The institution shall serve as an information repository over the course of the proposed project. • A schedule and plan for monitoring earth-moving activities, and a provision that monitoring personnel have the authority to halt construction activities should a potential fossil-find be unearthed. • Emergency discovery procedures, including survey and record keeping of fossil-finds, bulk sediment sample collection and processing, specimen identification, disposition, or museum curation of any specimens and data recovered. • Monitoring and data recovery activities shall be documented in daily monitoring reports, as well as a final mitigation monitoring report at the completion of construction activities, which shall be submitted to the City of Fresno. Implementation of the mitigation program and data recovery shall occur in accordance with SVP standards (SVP, 1995; SVP, 1996).	Water Division	Historic Preservation	Confirm that prior to all Metro Plan facilities involving excavations greater than 6 feet in depth (including pipeline crossings and groundwater reuse basins), that a qualified paleontologist is retained to design a monitoring and mitigation program.	Prior to construction On-going: construction	

Appendix B
Results of Air Quality Monitoring

NESWTF 6MG Tank

Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	33.00	Acre	33.00	1,437,480.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assumed 33 acres

Construction Phase - Construction phasing provided by applicant

Off-road Equipment - Construction equipment provided by applicant

Off-road Equipment - List of construction equipment provided by applicant

Off-road Equipment - List of construction equipment provided by applicant

Off-road Equipment - List of construction equipment provided by applicant

Off-road Equipment - List of construction equipment provided by applicant

Off-road Equipment - List of construction equipment provided by applicant

Off-road Equipment - List of construction equipment provided by applicant

Grading -

Trips and VMT - trips and trip lengths provided by applicant

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	6.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	35.00	14.00
tblConstructionPhase	NumDays	45.00	24.00
tblConstructionPhase	NumDays	20.00	6.00
tblConstructionPhase	NumDays	500.00	151.00
tblConstructionPhase	PhaseEndDate	7/31/2017	8/8/2017
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers

tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Dozers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	PhaseName		Grading - Backfill
tblOffRoadEquipment	PhaseName		Gavel Surface

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tblOffRoadEquipment	PhaseName		Site Prepartion
tblOffRoadEquipment	PhaseName		Gavel Surface
tblOffRoadEquipment	PhaseName		Grading - Excavation
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripLength	20.00	2,033.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripLength	20.00	1,580.00
tblTripsAndVMT	HaulingTripLength	20.00	1,580.00
tblTripsAndVMT	HaulingTripLength	20.00	25.00
tblTripsAndVMT	HaulingTripNumber	0.00	25.00
tblTripsAndVMT	HaulingTripNumber	0.00	200.00
tblTripsAndVMT	HaulingTripNumber	0.00	150.00
tblTripsAndVMT	HaulingTripNumber	0.00	150.00
tblTripsAndVMT	HaulingTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	236.00	0.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblTripsAndVMT	WorkerTripNumber	604.00	80.00
tblTripsAndVMT	WorkerTripNumber	13.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	8.00
tblTripsAndVMT	WorkerTripNumber	8.00	5.00

tblTripsAndVMT	WorkerTripNumber	5.00	3.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.2045	2.8112	1.1373	6.9600e-003	0.3451	0.0630	0.4081	0.1151	0.0584	0.1735	0.0000	655.9195	655.9195	0.0345	0.0000	656.7823
2018	0.1697	2.2471	0.9700	6.0500e-003	0.2807	0.0493	0.3300	0.0916	0.0456	0.1372	0.0000	568.0020	568.0020	0.0340	0.0000	568.8520
Maximum	**0.2045**	**2.8112**	**1.1373**	**6.9600e-003**	**0.3451**	**0.0630**	**0.4081**	**0.1151**	**0.0584**	**0.1735**	**0.0000**	**655.9195**	**655.9195**	**0.0345**	**0.0000**	**656.7823**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.2045	2.8112	1.1373	6.9600e-003	0.3451	0.0630	0.4081	0.1151	0.0584	0.1735	0.0000	655.9194	655.9194	0.0345	0.0000	656.7822
2018	0.1697	2.2471	0.9700	6.0500e-003	0.2807	0.0493	0.3300	0.0916	0.0456	0.1372	0.0000	568.0019	568.0019	0.0340	0.0000	568.8519
Maximum	**0.2045**	**2.8112**	**1.1373**	**6.9600e-003**	**0.3451**	**0.0630**	**0.4081**	**0.1151**	**0.0584**	**0.1735**	**0.0000**	**655.9194**	**655.9194**	**0.0345**	**0.0000**	**656.7822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**8-1-2017**	**10-31-2017**	2.2429	2.2429
3	**2-1-2018**	**4-30-2018**	0.9155	0.9155
4	**5-1-2018**	**7-31-2018**	0.8583	0.8583
		Highest	2.2429	2.2429

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0135	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.9000e-004	5.9000e-004	0.0000	0.0000	6.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0952	1.0573	0.8474	3.5800e-003	0.1888	5.0700e-003	0.1939	0.0509	4.8100e-003	0.0557	0.0000	333.0993	333.0993	0.0407	0.0000	334.1159
Waste						0.0000	0.0000		0.0000	0.0000	0.5765	0.0000	0.5765	0.0341	0.0000	1.4282
Water						0.0000	0.0000		0.0000	0.0000	0.0000	40.0341	40.0341	1.8100e-003	3.7000e-004	40.1910
Total	**0.1088**	**1.0573**	**0.8478**	**3.5800e-003**	**0.1888**	**5.0700e-003**	**0.1939**	**0.0509**	**4.8100e-003**	**0.0557**	**0.5765**	**373.1340**	**373.7105**	**0.0765**	**3.7000e-004**	**375.7357**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0135	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.9000e-004	5.9000e-004	0.0000	0.0000	6.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0952	1.0573	0.8474	3.5800e-003	0.1888	5.0700e-003	0.1939	0.0509	4.8100e-003	0.0557	0.0000	333.0993	333.0993	0.0407	0.0000	334.1159
Waste						0.0000	0.0000		0.0000	0.0000	0.5765	0.0000	0.5765	0.0341	0.0000	1.4282
Water						0.0000	0.0000		0.0000	0.0000	0.0000	40.0341	40.0341	1.8100e-003	3.7000e-004	40.1910
Total	**0.1088**	**1.0573**	**0.8478**	**3.5800e-003**	**0.1888**	**5.0700e-003**	**0.1939**	**0.0509**	**4.8100e-003**	**0.0557**	**0.5765**	**373.1340**	**373.7105**	**0.0765**	**3.7000e-004**	**375.7357**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

NESWTF 6MG Tank - Fresno County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2017	8/8/2017	5	6	
2	Site Prepartion	Site Preparation	8/8/2017	8/15/2017	5	6	
3	Grading - Excavation	Grading	8/15/2017	9/15/2017	5	24	
4	Tank Construction	Building Construction	9/15/2017	4/15/2018	5	151	
5	Grading - Backfill	Grading	4/15/2018	5/15/2018	5	22	
6	Gavel Surface	Paving	5/15/2018	6/1/2018	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

NESWTF 6MG Tank - Fresno County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Prepartion	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Backfill	Graders	1	8.00	187	0.41
Grading - Backfill	Rubber Tired Dozers	1	8.00	247	0.40
Gavel Surface	Graders	1	8.00	187	0.41
Site Prepartion	Excavators	1	8.00	158	0.38
Grading - Excavation	Graders	1	8.00	187	0.41
Gavel Surface	Off-Highway Trucks	1	8.00	402	0.38
Grading - Backfill	Scrapers	1	8.00	367	0.48
Tank Construction	Cranes	1	8.00	231	0.29
Tank Construction	Forklifts	1	8.00	89	0.20
Grading - Excavation	Rubber Tired Dozers	1	8.00	247	0.40
Gavel Surface	Rollers	1	8.00	80	0.38
Grading - Backfill	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading - Backfill	Off-Highway Trucks	1	8.00	402	0.38
Grading - Excavation	Scrapers	1	8.00	367	0.48
Grading - Excavation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading - Excavation	Off-Highway Trucks	1	8.00	402	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Tank Construction	2	80.00	0.00	200.00	40.00	7.30	40.00	LD_Mix	HDT_Mix	HHDT
Grading - Backfill	5	8.00	0.00	150.00	40.00	7.30	1,580.00	LD_Mix	HDT_Mix	HHDT
Demolition	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Excavation	5	8.00	0.00	150.00	40.00	7.30	1,580.00	LD_Mix	HDT_Mix	HHDT
Gavel Surface	3	5.00	0.00	40.00	40.00	7.30	25.00	LD_Mix	HDT_Mix	HHDT
Demolition	1	3.00	0.00	25.00	40.00	7.30	2,033.00	LD_Mix	HDT_Mix	HHDT
Site Prepartion	2	3.00	0.00	0.00	40.00	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6900e-003	0.0401	0.0139	3.0000e-005		1.9600e-003	1.9600e-003		1.8100e-003	1.8100e-003	0.0000	2.3785	2.3785	7.3000e-004	0.0000	2.3968
Total	**3.6900e-003**	**0.0401**	**0.0139**	**3.0000e-005**		**1.9600e-003**	**1.9600e-003**		**1.8100e-003**	**1.8100e-003**	**0.0000**	**2.3785**	**2.3785**	**7.3000e-004**	**0.0000**	**2.3968**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.2954	0.0436	8.9000e-004	0.0380	2.2400e-003	0.0402	9.9600e-003	2.1400e-003	0.0121	0.0000	84.4634	84.4634	9.6000e-004	0.0000	84.4874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1600e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.2460	0.2460	1.0000e-005	0.0000	0.2462
Total	**0.0102**	**0.2955**	**0.0447**	**8.9000e-004**	**0.0385**	**2.2400e-003**	**0.0407**	**0.0101**	**2.1400e-003**	**0.0122**	**0.0000**	**84.7095**	**84.7095**	**9.7000e-004**	**0.0000**	**84.7336**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6900e-003	0.0401	0.0139	3.0000e-005		1.9600e-003	1.9600e-003		1.8100e-003	1.8100e-003	0.0000	2.3785	2.3785	7.3000e-004	0.0000	2.3968
Total	**3.6900e-003**	**0.0401**	**0.0139**	**3.0000e-005**		**1.9600e-003**	**1.9600e-003**		**1.8100e-003**	**1.8100e-003**	**0.0000**	**2.3785**	**2.3785**	**7.3000e-004**	**0.0000**	**2.3968**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0100	0.2954	0.0436	8.9000e-004	0.0380	2.2400e-003	0.0402	9.9600e-003	2.1400e-003	0.0121	0.0000	84.4634	84.4634	9.6000e-004	0.0000	84.4874
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1600e-003	0.0000	5.0000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.2460	0.2460	1.0000e-005	0.0000	0.2462
Total	**0.0102**	**0.2955**	**0.0447**	**8.9000e-004**	**0.0385**	**2.2400e-003**	**0.0407**	**0.0101**	**2.1400e-003**	**0.0122**	**0.0000**	**84.7095**	**84.7095**	**9.7000e-004**	**0.0000**	**84.7336**

3.3 Site Prepartion - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7500e-003	0.0519	0.0239	4.0000e-005		2.5400e-003	2.5400e-003		2.3400e-003	2.3400e-003	0.0000	3.8152	3.8152	1.1700e-003	0.0000	3.8445
Total	**4.7500e-003**	**0.0519**	**0.0239**	**4.0000e-005**	**0.0181**	**2.5400e-003**	**0.0206**	**9.9300e-003**	**2.3400e-003**	**0.0123**	**0.0000**	**3.8152**	**3.8152**	**1.1700e-003**	**0.0000**	**3.8445**

3.3 Site Prepartion - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2460	0.2460	1.0000e-005	0.0000	0.2462
Total	**1.5000e-004**	**1.2000e-004**	**1.1600e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2460**	**0.2460**	**1.0000e-005**	**0.0000**	**0.2462**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7500e-003	0.0519	0.0239	4.0000e-005		2.5400e-003	2.5400e-003		2.3400e-003	2.3400e-003	0.0000	3.8152	3.8152	1.1700e-003	0.0000	3.8445
Total	**4.7500e-003**	**0.0519**	**0.0239**	**4.0000e-005**	**0.0181**	**2.5400e-003**	**0.0206**	**9.9300e-003**	**2.3400e-003**	**0.0123**	**0.0000**	**3.8152**	**3.8152**	**1.1700e-003**	**0.0000**	**3.8445**

3.3 Site Prepartion - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.2000e-004	1.1600e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2460	0.2460	1.0000e-005	0.0000	0.2462
Total	**1.5000e-004**	**1.2000e-004**	**1.1600e-003**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2460**	**0.2460**	**1.0000e-005**	**0.0000**	**0.2462**

3.4 Grading - Excavation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0914	0.0000	0.0914	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0514	0.6043	0.2887	5.6000e-004		0.0259	0.0259		0.0238	0.0238	0.0000	51.9614	51.9614	0.0159	0.0000	52.3595
Total	**0.0514**	**0.6043**	**0.2887**	**5.6000e-004**	**0.0914**	**0.0259**	**0.1173**	**0.0418**	**0.0238**	**0.0656**	**0.0000**	**51.9614**	**51.9614**	**0.0159**	**0.0000**	**52.3595**

3.4 Grading - Excavation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0469	1.3793	0.2033	4.1400e-003	0.1012	0.0105	0.1116	0.0278	0.0100	0.0378	0.0000	394.0623	394.0623	4.5700e-003	0.0000	394.1766
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6300e-003	1.3100e-003	0.0123	3.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.6243	2.6243	9.0000e-005	0.0000	2.6265
Total	**0.0485**	**1.3806**	**0.2156**	**4.1700e-003**	**0.1040**	**0.0105**	**0.1145**	**0.0286**	**0.0100**	**0.0386**	**0.0000**	**396.6866**	**396.6866**	**4.6600e-003**	**0.0000**	**396.8030**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0914	0.0000	0.0914	0.0418	0.0000	0.0418	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0514	0.6043	0.2887	5.6000e-004		0.0259	0.0259		0.0238	0.0238	0.0000	51.9614	51.9614	0.0159	0.0000	52.3594
Total	**0.0514**	**0.6043**	**0.2887**	**5.6000e-004**	**0.0914**	**0.0259**	**0.1173**	**0.0418**	**0.0238**	**0.0656**	**0.0000**	**51.9614**	**51.9614**	**0.0159**	**0.0000**	**52.3594**

3.4 Grading - Excavation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0469	1.3793	0.2033	4.1400e-003	0.1012	0.0105	0.1116	0.0278	0.0100	0.0378	0.0000	394.0623	394.0623	4.5700e-003	0.0000	394.1766
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6300e-003	1.3100e-003	0.0123	3.0000e-005	2.8400e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.6243	2.6243	9.0000e-005	0.0000	2.6265
Total	**0.0485**	**1.3806**	**0.2156**	**4.1700e-003**	**0.1040**	**0.0105**	**0.1145**	**0.0286**	**0.0100**	**0.0386**	**0.0000**	**396.6866**	**396.6866**	**4.6600e-003**	**0.0000**	**396.8030**

3.5 Tank Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0332	0.3682	0.1545	2.8000e-004		0.0191	0.0191		0.0175	0.0175	0.0000	25.7260	25.7260	7.8800e-003	0.0000	25.9230
Total	**0.0332**	**0.3682**	**0.1545**	**2.8000e-004**		**0.0191**	**0.0191**		**0.0175**	**0.0175**	**0.0000**	**25.7260**	**25.7260**	**7.8800e-003**	**0.0000**	**25.9230**

3.5 Tank Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2000e-004	0.0290	4.0400e-003	8.0000e-005	2.9900e-003	1.8000e-004	3.1800e-003	7.9000e-004	1.8000e-004	9.6000e-004	0.0000	7.2943	7.2943	4.0000e-004	0.0000	7.3043
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0517	0.0416	0.3908	9.2000e-004	0.0899	5.8000e-004	0.0905	0.0239	5.3000e-004	0.0244	0.0000	83.1021	83.1021	2.7800e-003	0.0000	83.1715
Total	**0.0526**	**0.0706**	**0.3949**	**1.0000e-003**	**0.0929**	**7.6000e-004**	**0.0937**	**0.0247**	**7.1000e-004**	**0.0254**	**0.0000**	**90.3964**	**90.3964**	**3.1800e-003**	**0.0000**	**90.4757**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0332	0.3682	0.1545	2.8000e-004		0.0191	0.0191		0.0175	0.0175	0.0000	25.7259	25.7259	7.8800e-003	0.0000	25.9230
Total	**0.0332**	**0.3682**	**0.1545**	**2.8000e-004**		**0.0191**	**0.0191**		**0.0175**	**0.0175**	**0.0000**	**25.7259**	**25.7259**	**7.8800e-003**	**0.0000**	**25.9230**

3.5 Tank Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.2000e-004	0.0290	4.0400e-003	8.0000e-005	2.9900e-003	1.8000e-004	3.1800e-003	7.9000e-004	1.8000e-004	9.6000e-004	0.0000	7.2943	7.2943	4.0000e-004	0.0000	7.3043
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0517	0.0416	0.3908	9.2000e-004	0.0899	5.8000e-004	0.0905	0.0239	5.3000e-004	0.0244	0.0000	83.1021	83.1021	2.7800e-003	0.0000	83.1715
Total	**0.0526**	**0.0706**	**0.3949**	**1.0000e-003**	**0.0929**	**7.6000e-004**	**0.0937**	**0.0247**	**7.1000e-004**	**0.0254**	**0.0000**	**90.3964**	**90.3964**	**3.1800e-003**	**0.0000**	**90.4757**

3.5 Tank Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0281	0.3148	0.1400	2.7000e-004		0.0158	0.0158		0.0145	0.0145	0.0000	24.9834	24.9834	7.7800e-003	0.0000	25.1778
Total	**0.0281**	**0.3148**	**0.1400**	**2.7000e-004**		**0.0158**	**0.0158**		**0.0145**	**0.0145**	**0.0000**	**24.9834**	**24.9834**	**7.7800e-003**	**0.0000**	**25.1778**

3.5 Tank Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.8000e-004	0.0262	3.5900e-003	7.0000e-005	2.9900e-003	1.2000e-004	3.1100e-003	7.8000e-004	1.2000e-004	9.0000e-004	0.0000	7.1275	7.1275	3.7000e-004	0.0000	7.1369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0453	0.0355	0.3345	8.9000e-004	0.0888	5.5000e-004	0.0893	0.0236	5.1000e-004	0.0241	0.0000	80.0107	80.0107	2.4000e-003	0.0000	80.0707
Total	**0.0461**	**0.0617**	**0.3381**	**9.6000e-004**	**0.0917**	**6.7000e-004**	**0.0924**	**0.0244**	**6.3000e-004**	**0.0250**	**0.0000**	**87.1382**	**87.1382**	**2.7700e-003**	**0.0000**	**87.2076**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0281	0.3148	0.1400	2.7000e-004		0.0158	0.0158		0.0145	0.0145	0.0000	24.9833	24.9833	7.7800e-003	0.0000	25.1778
Total	**0.0281**	**0.3148**	**0.1400**	**2.7000e-004**		**0.0158**	**0.0158**		**0.0145**	**0.0145**	**0.0000**	**24.9833**	**24.9833**	**7.7800e-003**	**0.0000**	**25.1778**

3.5 Tank Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.8000e-004	0.0262	3.5900e-003	7.0000e-005	2.9900e-003	1.2000e-004	3.1100e-003	7.8000e-004	1.2000e-004	9.0000e-004	0.0000	7.1275	7.1275	3.7000e-004	0.0000	7.1369
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0453	0.0355	0.3345	8.9000e-004	0.0888	5.5000e-004	0.0893	0.0236	5.1000e-004	0.0241	0.0000	80.0107	80.0107	2.4000e-003	0.0000	80.0707
Total	**0.0461**	**0.0617**	**0.3381**	**9.6000e-004**	**0.0917**	**6.7000e-004**	**0.0924**	**0.0244**	**6.3000e-004**	**0.0250**	**0.0000**	**87.1382**	**87.1382**	**2.7700e-003**	**0.0000**	**87.2076**

3.6 Grading - Backfill - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0837	0.0000	0.0837	0.0383	0.0000	0.0383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0426	0.4932	0.2378	5.1000e-004		0.0208	0.0208		0.0191	0.0191	0.0000	46.8745	46.8745	0.0146	0.0000	47.2393
Total	**0.0426**	**0.4932**	**0.2378**	**5.1000e-004**	**0.0837**	**0.0208**	**0.1046**	**0.0383**	**0.0191**	**0.0574**	**0.0000**	**46.8745**	**46.8745**	**0.0146**	**0.0000**	**47.2393**

3.6 Grading - Backfill - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0400	1.2429	0.1831	4.0900e-003	0.1012	7.0400e-003	0.1082	0.0278	6.7300e-003	0.0345	0.0000	389.4655	389.4655	4.1400e-003	0.0000	389.5690
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	1.0400e-003	9.8100e-003	3.0000e-005	2.6000e-003	2.0000e-005	2.6200e-003	6.9000e-004	1.0000e-005	7.1000e-004	0.0000	2.3470	2.3470	7.0000e-005	0.0000	2.3487
Total	**0.0413**	**1.2440**	**0.1929**	**4.1200e-003**	**0.1038**	**7.0600e-003**	**0.1108**	**0.0285**	**6.7400e-003**	**0.0353**	**0.0000**	**391.8125**	**391.8125**	**4.2100e-003**	**0.0000**	**391.9177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0837	0.0000	0.0837	0.0383	0.0000	0.0383	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0426	0.4932	0.2378	5.1000e-004		0.0208	0.0208		0.0191	0.0191	0.0000	46.8745	46.8745	0.0146	0.0000	47.2393
Total	**0.0426**	**0.4932**	**0.2378**	**5.1000e-004**	**0.0837**	**0.0208**	**0.1046**	**0.0383**	**0.0191**	**0.0574**	**0.0000**	**46.8745**	**46.8745**	**0.0146**	**0.0000**	**47.2393**

3.6 Grading - Backfill - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0400	1.2429	0.1831	4.0900e-003	0.1012	7.0400e-003	0.1082	0.0278	6.7300e-003	0.0345	0.0000	389.4655	389.4655	4.1400e-003	0.0000	389.5690
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	1.0400e-003	9.8100e-003	3.0000e-005	2.6000e-003	2.0000e-005	2.6200e-003	6.9000e-004	1.0000e-005	7.1000e-004	0.0000	2.3470	2.3470	7.0000e-005	0.0000	2.3487
Total	**0.0413**	**1.2440**	**0.1929**	**4.1200e-003**	**0.1038**	**7.0600e-003**	**0.1108**	**0.0285**	**6.7400e-003**	**0.0353**	**0.0000**	**391.8125**	**391.8125**	**4.2100e-003**	**0.0000**	**391.9177**

3.7 Gavel Surface - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1256	0.0564	1.6000e-004		4.9500e-003	4.9500e-003		4.5500e-003	4.5500e-003	0.0000	14.3736	14.3736	4.4700e-003	0.0000	14.4855
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1256**	**0.0564**	**1.6000e-004**		**4.9500e-003**	**4.9500e-003**		**4.5500e-003**	**4.5500e-003**	**0.0000**	**14.3736**	**14.3736**	**4.4700e-003**	**0.0000**	**14.4855**

3.7 Gavel Surface - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	7.4100e-003	9.8000e-004	2.0000e-005	4.3000e-004	3.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.5000e-004	0.0000	1.8864	1.8864	1.4000e-004	0.0000	1.8899
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	4.1000e-004	3.9000e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9335	0.9335	3.0000e-005	0.0000	0.9342
Total	**7.4000e-004**	**7.8200e-003**	**4.8800e-003**	**3.0000e-005**	**1.4700e-003**	**4.0000e-005**	**1.5000e-003**	**4.0000e-004**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**2.8198**	**2.8198**	**1.7000e-004**	**0.0000**	**2.8241**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1256	0.0564	1.6000e-004		4.9500e-003	4.9500e-003		4.5500e-003	4.5500e-003	0.0000	14.3736	14.3736	4.4700e-003	0.0000	14.4855
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0109**	**0.1256**	**0.0564**	**1.6000e-004**		**4.9500e-003**	**4.9500e-003**		**4.5500e-003**	**4.5500e-003**	**0.0000**	**14.3736**	**14.3736**	**4.4700e-003**	**0.0000**	**14.4855**

3.7 Gavel Surface - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	7.4100e-003	9.8000e-004	2.0000e-005	4.3000e-004	3.0000e-005	4.6000e-004	1.2000e-004	3.0000e-005	1.5000e-004	0.0000	1.8864	1.8864	1.4000e-004	0.0000	1.8899
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	4.1000e-004	3.9000e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9335	0.9335	3.0000e-005	0.0000	0.9342
Total	**7.4000e-004**	**7.8200e-003**	**4.8800e-003**	**3.0000e-005**	**1.4700e-003**	**4.0000e-005**	**1.5000e-003**	**4.0000e-004**	**4.0000e-005**	**4.3000e-004**	**0.0000**	**2.8198**	**2.8198**	**1.7000e-004**	**0.0000**	**2.8241**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0952	1.0573	0.8474	3.5800e-003	0.1888	5.0700e-003	0.1939	0.0509	4.8100e-003	0.0557	0.0000	333.0993	333.0993	0.0407	0.0000	334.1159
Unmitigated	0.0952	1.0573	0.8474	3.5800e-003	0.1888	5.0700e-003	0.1939	0.0509	4.8100e-003	0.0557	0.0000	333.0993	333.0993	0.0407	0.0000	334.1159

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	62.37	750.75	552.42	492,547	492,547
Total	62.37	750.75	552.42	492,547	492,547

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.475203	0.033904	0.168176	0.133649	0.019863	0.005290	0.031901	0.120662	0.002374	0.001757	0.005377	0.001134	0.000710

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0135	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.9000e-004	5.9000e-004	0.0000	0.0000	6.3000e-004
Unmitigated	0.0135	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.9000e-004	5.9000e-004	0.0000	0.0000	6.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.9000e-004	5.9000e-004	0.0000	0.0000	6.3000e-004
Total	**0.0136**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.9000e-004**	**5.9000e-004**	**0.0000**	**0.0000**	**6.3000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0135					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.9000e-004	5.9000e-004	0.0000	0.0000	6.3000e-004
Total	**0.0136**	**0.0000**	**3.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.9000e-004**	**5.9000e-004**	**0.0000**	**0.0000**	**6.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	40.0341	1.8100e-003	3.7000e-004	40.1910
Unmitigated	40.0341	1.8100e-003	3.7000e-004	40.1910

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 39.3189	40.0341	1.8100e-003	3.7000e-004	40.1910
Total		**40.0341**	**1.8100e-003**	**3.7000e-004**	**40.1910**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 39.3189	40.0341	1.8100e-003	3.7000e-004	40.1910
Total		**40.0341**	**1.8100e-003**	**3.7000e-004**	**40.1910**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5765	0.0341	0.0000	1.4282
Unmitigated	0.5765	0.0341	0.0000	1.4282

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	2.84	0.5765	0.0341	0.0000	1.4282
Total		**0.5765**	**0.0341**	**0.0000**	**1.4282**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	2.84	0.5765	0.0341	0.0000	1.4282
Total		**0.5765**	**0.0341**	**0.0000**	**1.4282**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix C
List of Potentially Affected Species

APPENDIX C
LIST OF POTENTIALLY AFFECTED SPECIES

A list of special-status species that have the potential to occur within the vicinity of the study area was compiled based on data in the CNDDB, the USFWS list of Federal Endangered and Threatened Species that occur in or may be affected by the Project, and the CNPS Inventory of Rare and Endangered Plants. A list of special-status species, their general habitat requirements, and an assessment of their potential to occur with the Project area (Project site) is provided below.

The "Potential for Occurrence" category is defined as follows:

- **Unlikely:** The Project site and/or surrounding area do not support suitable habitat for a particular species, or the Project site is outside of the species known range.
- **Low:** The Project site and/or immediate area only provide limited amounts and low quality habitat for a particular species. In addition, the known range for a particular species may be outside of the Project site.
- **Medium:** The Project site and/or immediate area provide suitable habitat for a particular species.
- **High:** The Project site and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and/or within the Project site.

Conclusions regarding habitat suitability and species occurrence are based on a reconnaissance survey described previously, as well as the analysis of existing literature and databases described in Section 2.4.

APPENDIX C
LIST OF POTENTIALLY AFFECTED SPECIES

Species	Status Federal/ State/ CNPS	Suitable Habitat	Potential for proposed Project to Effect
Plants			
Carpenteria californica Tree-anemone	--/ST/1B.2	Well drained granitic soils, mostly in north-facing ravines and drainages in chaparral and foothill woodlands. Blooms May – July. Found at 820 to 4,530 feet.	**Unlikely**. No suitable habitat present within Project area.
Castilleja campestris var. *succulenta* Succulent owl's-clover	FT/SE/1B.2	Vernal pools. Blooms April – May. Found at 150 to 2,500 feet.	**Unlikely**. No suitable habitat present within Project area.
Caulanthus californicus California jewelflower	FE/SE/1B.1	Scrub, pinyon and juniper woodland, and valley and foothill grassland. Blooms February – May. Found at 200 to 3,300 feet.	**Unlikely**. No suitable habitat present within Project area.
Downingia pusilla Dwarf dowingia	--/--/1B.1	Vernal pools, rarely in upland grasslands. Blooms March – May. Found at 0 to 1,500 feet.	**Unlikely**. No suitable habitat present within Project area.
Eryngium spinosepalum Spiny-sepaled button-celery	--/--/1B.2	Vernal pools, rarely in upland grasslands. Blooms April – June. Found at 200 to 3,200 feet.	**Unlikely**. No suitable habitat present within Project area.
Gratiola heterosepala Boggs Lake hedge hyssop	--/SE/1B.2	Lake margins, vernal pools, edges in freshwater wetlands and riparian habitats. Blooms April – August. Found at 35 to 5,905 feet.	**Unlikely**. No suitable habitat present within Project area.
Imperata brevifolia California satintail	--/--/2B.1	Chaparral, coastal scrub, desert scrub, meadows and seeps, and riparian. Blooms September – May. Found at 0 to 4,000 feet.	**Unlikely**. No suitable habitat present within Project area.
Lagophylla dichotoma Forked hare-leaf	--/--/1B.1	Woodland, valley and foothill grassland. Blooms April – May. Found at 100 to 1,100 feet.	**Unlikely**. No suitable habitat present within Project area.
Leptosiphon serrulatus Madera leptosiphon	--/--/1B.2	Woodland, lower montane coniferous forest. Blooms April – May. Found at 900 to 4,300 feet.	**Unlikely**. No suitable habitat present within Project area.
Lupinus citrinus var. citrinus Orange lupine	--/--/1B.2	Rocky terrain, granitic outcrops in chaparral, foothill woodland, yellow pine forest. Blooms April to July. Found at 2,200 to 4,035 feet.	**Unlikely**. No suitable habitat present within Project area.
Orcuttia inaequalis San Joaquin Orcutt grass	FT/SE/1B.1	Vernal pools. Blooms April – September. Found at 0 to 2,500 feet.	**Unlikely**. No suitable habitat present within Project area.
Orcuttia pilosa Hairy Orcutt grass	FE/SE/1B.1	Vernal pools. Blooms May – September. Found at 100 to 600 feet.	**Unlikely**. No suitable habitat present within Project area.
Pseudobahia bahiifolia Hartweg's golden sunburst	FE/SE/1B.1	Woodland, valley and foothill grassland. Blooms March – April. Found at 0 to 500 feet.	**Unlikely**. No suitable habitat present within Project area.
Pseudobahia peirsonii San Joaquin adobe sunburst	FT/SE/1B.1	Woodland, valley and foothill grassland. Blooms March – April. Found at 200 to 2,700 feet.	**Unlikely**. No suitable habitat present within Project area.
Sagittaria sanfordii	--/--/1B.1	Freshwater marshes. Blooms May – November. Found at 0 to	**Unlikely**. No suitable habitat present within Project area.

APPENDIX C
LIST OF POTENTIALLY AFFECTED SPECIES

Species	Status Federal/ State/ CNPS	Suitable Habitat	Potential for proposed Project to Effect
Sanford's arrowhead		2,200 feet.	
Tropidocarpum capparideum Caper-fruited tropidocarpum	--/--/1B.1	Alkaline grasslands in hilly areas. Blooms March–April. Found at 0 to 1,500 feet.	**Unlikely**. No suitable habitat present within Project area, and CNPS presumes local occurrences are extirpated, if once present.
Tuctoria greenei Greene's tuctoria	--/--/1B.1	Vernal pools. Blooms May–September. Found at 0 to 3,600 feet.	**Unlikely**. No suitable habitat present within Project area.

APPENDIX C (Continued)
LIST OF POTENTIALLY AFFECTED SPECIES

Species	Status Federal/ State/ CNPS	Suitable Habitat	Potential for proposed Project to Effect
Invertebrates			
Branchinecta lynchi Vernal pool fairy shrimp	FT/--/--	Life cycle restricted to vernal pools.	**Unlikely**. No suitable habitat present within Project area.
Linderiella occidentalis California linderiella occidentalis	FE/SE/--	Life cycle restricted to vernal pools.	**Unlikely**. No suitable habitat present within Project area.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/--/--	Only in the Central Valley of California, in association with blue elderberry (*Sambucus nigra* ssp. *caerulea*). Prefers to lay eggs in elderberries, 2-8 inches in diameter, some preference shown for "stressed" elderberries.	**Unlikely**. Marginal habitat for host plant, however no elderberry shrubs were observed during the reconnaissance survey.
Amphibians			
Ambystoma californiense California tiger salamander	FT/ST/--	Vernal pools, ponds, or semi-permanent calm waters for breeding and larval maturation, upland areas containing small mammal burrows for aestivation.	**Unlikely**. No suitable habitat present within Project area or adjacent areas.
Rana draytonii California red-legged frog	FT/SSC/--	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development and must have access to aestivation habitat.	**Unlikely**. Although this species can be found in stock ponds in farmlands, it requires dense vegetation associated with the ponds. The treatment and overflow ponds do not have the appropriate vegetation composition and thus are not suitable habitat for this species. This species was not observed during the reconnaissance survey.
Reptiles			
Emys marmorata Western pond turtle	--/SSC/--	Permanent or nearly permanent water in a wide variety of habitat types, including permanent ponds, lakes, streams, irrigation ditches, or permanent pools along intermittent streams. Species requires basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks.	**Low**. Suitable habitat present within and adjacent to the Project area in the canal and the treatment ponds. This species was not observed during the reconnaissance survey.
Gambelia silus Blunt-nosed leopard lizard	FE/SE/--	Sparsely vegetated scrub and grassland habitats in areas of low topographic relief.	**Unlikely**. No suitable habitat present within Project area.
Phrynosoma blainvillii	--/SSC/--	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. Found in chaparral, cismontane and riparian woodlands, pinon and juniper woodlands, coastal and riparian scrub, and valley and foothill grasslands	**Unlikely**. No suitable habitat present within Project area. CNDDB considers this species possibly extirpated from this area. The previous record for the species in this area was in 1893.
Spea hammondii Western spadefoot	--/SSC/--	Seasonally in grasslands, prairies, chaparral, and woodlands, in and around wet sites. Breeds in shallow, temporary pools formed by winter rains. Takes refuge in burrows.	**Unlikely**. No suitable habitat present within Project area.
Thamnophis gigas Giant garter snake	FE/SE/--	Marshes, sloughs, and irrigation canals/ditches, less with slow-moving creeks, and absent from larger rivers. Species is extremely aquatic and is rarely found away from water, and forages in water for food. Young are born in secluded sites, such as loose bark of rotting logs, dense vegetation, or crevices of rocky shorelines.	**Unlikely**. No suitable habitat present within Project area.

APPENDIX C (Continued)
LIST OF POTENTIALLY AFFECTED SPECIES

Species	Status Federal/ State/ CNPS	Suitable Habitat	Potential for proposed Project to Effect
		Species basks on emergent vegetation such as cattails or tules. Takes refuge in mammal burrows, or piles of vegetation.	
Fish			
Oncorhynjchus mykiss irideus Steelhead – Central Valley DPS	FT/--/--	This ESU enters the Sacramento and San Joaquin Rivers and their tributaries from July to May; spawning from December to April. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	**Unlikely**. No suitable habitat present within Project area.
Hypomesus transpacificus Delta smelt	FT/ST/--	Open surface waters in the Sacramento/San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators. May be affected by downstream sedimentation.	**Unlikely**. No suitable habitat present within Project area.
Mylopharodon conocephalus Hardhead	FE/SE/--	Found in small to large streams in a low to mid-elevation environments. May also inhabit lakes or reservoirs. Known to the San Joaquin River and its tributaries upstream of the Friant Dam. Clear, deep pools with sand-gravel-boulder bottoms & slow water velocity.	**Unlikely**. No suitable habitat present within Project area.
Mammals			
Dipodomys nitratoides exilis Fresno kangaroo rat	FE/SE/--	Chenopod scrub, alkali sink, and valley grasslands with nearly level topography, consisting of bare alkaline clay-based soils	**Unlikely**. Limited and low quality habitat present within, and adjacent to, the Project area.
Euderma maculatum Spotted bat	--/SSC/--	Deserts, grasslands, and mixed conifer forests. Roost in rock crevices, cliffs, caves, and buildings.	**Unlikely**. Limited and low quality habitat present within, and adjacent to, the Project area.
Eumops perotis californicus Western mastiff bat	--/SSC/--	Primarily a cliff dwelling species, roosts in crevices in exfoliating rock slabs, in boulder crevices, and buildings that are high above the ground, forages within open grassland, forested, or wooded habitats, including agricultural areas.	**Unlikely**. No suitable habitat present within Project area.
Taxidea taxus American badger	--/SSC/--	Most abundant in drier open stage of most shrub, forest, and herbaceous habitats, with friable soils. Use dense vegetation and rocky areas for cover and den sites. Prefer forest interspersed with meadows or alpine fell-fields.	**Low**. Suitable habitat is present adjacent to the Project area.

APPENDIX C (Continued)
LIST OF POTENTIALLY AFFECTED SPECIES

Species	Status Federal/ State/ CNPS	Suitable Habitat	Potential for proposed Project to Effect
Mammals (cont.)			
Vulpes macrotis mutica San Joaquin kit fox	FE/ST/--	San Joaquin Valley grasslands, scrublands, and agricultural and grazing areas.	**Medium.** Limited, low quality habitat is located within the Project area. The highly disturbed nature of the Project and surrounding area likely precludes presence of SJKF, however there is potential for SJKF to disperse within the Project area and surrounding areas. Suitable foraging and denning habitat is present within and adjacent to the Project area in ruderal habitat areas and agricultural habitats.
Birds			
Agelaius tricolor Tricolored blackbird	--/SSC/--	Nests near freshwater, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and tall herb; forages in grassland and cropland habitats.	**Unlikely**. No suitable nesting or foraging habitat is present within or immediately adjacent to Project area.
Athene cunicularia Burrowing owl	--/SSC/--	Forages in open plains, grasslands, and prairies; typically nests in abandoned small mammal burrows.	**Medium.** Suitable nesting and foraging habitat present around the Project area within the ruderal fields and in the burrows identified within the study area. This species was not observed during the reconnaissance survey.
Buteo swainsoni Swainson's hawk	--/ST/--	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	**Medium.** Suitable nesting and foraging habitat is present within a half mile of the Project area. However, this species was not observed during the reconnaissance survey.
Cocyzus americanus occidentalis Western yellow-billed cuckoo	FT/SE/--	Densely foliaged, valley foothill, desert, deciduous riparian thickets or forest habitats with dense, low-level or understory foliage which abut on slow-moving watercourses, backwaters, or seeps.	**Unlikely**. Suitable habitat is not present within or adjacent to the Project area. This species was not observed during the reconnaissance survey.
Birds (cont.)			
Vireo bellii pusullus Least Bell's vireo	FE/SE/--	Summer resident of California; Riparian habitat with dense thickets of willows, misquite, and scrub oak.	**Unlikely**. The Project area is outside the current range for this species. One occurrence for this species is recorded in CNDDB within 5 miles of the Project area, however, this record is from 1906, and CNDDB considers this species possibly extirpated from the area. This species was not observed during reconnaissance surveys.
Natural Communities			
Great Valley Mixed Riparian Forest	Natural Community		**Unlikely**. This natural community is not present within Project area.
Northern Claypan Vernal Pool	Natural Community		**Unlikely**. This natural community is not present within Project area.

APPENDIX C (Continued)
LIST OF POTENTIALLY AFFECTED SPECIES

Species	Status Federal/ State/ CNPS	Suitable Habitat	Potential for proposed Project to Effect
Northern Hardpan Vernal Pool	Natural Community		**Unlikely**. This natural community is not present within Project area.
Sycamore Alluvial Woodland	Natural Community		**Unlikely**. This natural community is not present within Project area.

STATUS CODES:

Federal
FE = Endangered
FT = Threatened
FC = Candidate
BEPA = Bald Eagle Protection Act

State
CE = Endangered
CT = Threatened
FP = Fully Protected
SSC = (CA) Department of Fish and Wildlife Species of Special Concern

California Native Plant Society
Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
Rank 2 = Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 3 = Plants about which we need more information--a review list
Rank 4 = Plants of limited distribution--a watch list

0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California

SOURCE: CDFW, 2017; USFWS, 2017; CNPS, 2017

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
PHONE: (916)414-6600 FAX: (916)414-6713

Consultation Code: 08ESMF00-2017-SLI-1162 February 14, 2017

Event Code: 08ESMF00-2017-E-02750

Project Name: City of Fresno Northeast Surface Water Treatment Facility - 6 Million Gallon Storage Tank Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and

the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: City of Fresno Northeast Surface Water Treatment Facility - 6 Million Gallon Storage Tank Project

Official Species List

Provided by:

Sacramento Fish and Wildlife Office
FEDERAL BUILDING
2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
(916) 414-6600

Consultation Code: 08ESMF00-2017-SLI-1162
Event Code: 08ESMF00-2017-E-02750

Project Type: WATER SUPPLY / DELIVERY

Project Name: City of Fresno Northeast Surface Water Treatment Facility - 6 Million Gallon Storage Tank Project
Project Description: The 6 million gallon storage tank will be constructed within the City of Fresno Northeast Surface Water Treatment Facility located off of N Chestnut Ave north of E Behmyer Ave in Fresno, CA. It will involve the construction of the 6 million gallon storage tank and an adjacent overflow pond to the west. This project will begin potentially this year in the spring/summer season.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:

Project Coordinates: MULTIPOLYGON (((-119.73863840103151 36.88150861648005, -119.73865985870363 36.88506138418839, -119.73323106765748 36.88510429100068, -119.73312377929689 36.881500034715394, -119.73863840103151 36.88150861648005)))

Project Counties: Fresno, CA

Endangered Species Act Species List

There are a total of 13 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	**Status**	**Has Critical Habitat**	**Condition(s)**
California red-legged frog *(Rana draytonii)* Population: Wherever found	Threatened	Final designated	
California tiger Salamander *(Ambystoma californiense)* Population: U.S.A. (Central CA DPS)	Threatened	Final designated	
Crustaceans			
Conservancy fairy shrimp *(Branchinecta conservatio)* Population: Wherever found	Endangered	Final designated	
Vernal Pool fairy shrimp *(Branchinecta lynchi)* Population: Wherever found	Threatened	Final designated	
Fishes			
Delta smelt *(Hypomesus transpacificus)* Population: Wherever found	Threatened	Final designated	
steelhead *(Oncorhynchus (=salmo)*	Threatened	Final designated	

mykiss) Population: Northern California DPS			
Flowering Plants			
Fleshy owl's-clover *(Castilleja campestris ssp. succulenta)* Population: Wherever found	Threatened	Final designated	
Hartweg's Golden sunburst *(Pseudobahia bahiifolia)* Population: Wherever found	Endangered		
San Joaquin Orcutt grass *(Orcuttia inaequalis)* Population: Wherever found	Threatened	Final designated	
Mammals			
Fresno kangaroo rat *(Dipodomys nitratoides exilis)* Population: Wherever found	Endangered	Final designated	
San Joaquin Kit fox *(Vulpes macrotis mutica)* Population: wherever found	Endangered		
Reptiles			
Blunt-Nosed Leopard lizard *(Gambelia silus)* Population: Wherever found	Endangered		
Giant Garter snake *(Thamnophis gigas)* Population: Wherever found	Threatened		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

CNPS California Native Plant Rare and Endangered Plant Inventory

Plant List

17 matches found. *Click on scientific name for details*

Search Criteria

Rare Plant Rank is one of [1A, 1B, 2A, 2B],
FESA is one of [Endangered, Threatened, Species of Concern, Not Listed],
CESA is one of [Endangered, Threatened, Rare, Not Listed], Found in 9 Quads around 36119H6

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Carpenteria californica	tree-anemone	Hydrangeaceae	perennial evergreen shrub	1B.2	S1?	G1?
Castilleja campestris var. succulenta	succulent owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	1B.2	S2S3	G4? T2T3
Caulanthus californicus	California jewelflower	Brassicaceae	annual herb	1B.1	S1	G1
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	2B.2	S2	GU
Eryngium spinosepalum	spiny-sepaled button-celery	Apiaceae	annual / perennial herb	1B.2	S2	G2
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	S2	G2
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	2B.1	S3	G4
Lagophylla dichotoma	forked hare-leaf	Asteraceae	annual herb	1B.1	S2	G2
Leptosiphon serrulatus	Madera leptosiphon	Polemoniaceae	annual herb	1B.2	S3	G3
Lupinus citrinus var. citrinus	orange lupine	Fabaceae	annual herb	1B.2	S2	G2T2
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
Orcuttia pilosa	hairy Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
Pseudobahia bahiifolia	Hartweg's golden sunburst	Asteraceae	annual herb	1B.1	S2	G2
Pseudobahia peirsonii	San Joaquin adobe sunburst	Asteraceae	annual herb	1B.1	S1	G1
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb	1B.2	S3	G3
Tropidocarpum capparideum	caper-fruited tropidocarpum	Brassicaceae	annual herb	1B.1	S1	G1
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	1B.1	S1	G1

Suggested Citation

CNPS, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed 16 February 2017].

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CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Clovis (3611976) OR Fresno North (3611977) OR Friant (3611986) OR Lanes Bridge (3611987))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	948	3	None	Candidate Endangered	G2G3	S1S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Ambystoma californiense	California tiger salamander	Amphibians	AAAAA01180	1148	29	Threatened	Threatened	G2G3	S2S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
Ardea alba	great egret	Birds	ABNGA04040	38	1	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	100	1	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern	null
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1932	4	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	233	1	None	None	G3G4	S1S2	null	null	null
Branchinecta lynchi	vernal pool fairy shrimp	Crustaceans	ICBRA03030	754	41	Threatened	None	G3	S3	null	IUCN_VU-Vulnerable	Valley & foothill grassland, Vernal pool, Wetland
Branchinecta mesovallensis	midvalley fairy shrimp	Crustaceans	ICBRA03150	126	2	None	None	G2	S2S3	null	null	Vernal pool, Wetland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2423	2	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Castilleja campestris var. succulenta	succulent owl's-clover	Dicots	PDSCR0D3Z1	91	8	Threatened	Endangered	G4? T2T3	S2S3	1B.2	null	Vernal pool, Wetland
Caulanthus californicus	California jewelflower	Dicots	PDBRA31010	63	1	Endangered	Endangered	G1	S1	1B.1	null	Chenopod scrub, Pinon & juniper woodlands, Valley & foothill grassland

Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	155	2	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Riparian forest
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Insects	IICOL48011	271	1	Threatened	None	G3T2	S2	null	null	Riparian scrub
Dipodomys nitratoides exilis	Fresno kangaroo rat	Mammals	AMAFD03151	12	1	Endangered	Endangered	G3TH	SH	null	IUCN_VU-Vulnerable	Chenopod scrub
Downingia pusilla	dwarf downingia	Dicots	PDCAM060C0	126	1	None	None	GU	S2	2B.2	null	Valley & foothill grassland, Vernal pool, Wetland
Efferia antiochi	Antioch efferian robberfly	Insects	IIDIP07010	4	2	None	None	G1G2	S1S2	null	null	Interior dunes
Egretta thula	snowy egret	Birds	ABNGA06030	17	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Riparian forest, Riparian woodland, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1217	1	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Eremophila alpestris actia	California horned lark	Birds	ABPAT02011	90	1	None	None	G5T3Q	S3	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Marine intertidal & splash zone communities, Meadow & seep
Eryngium spinosepalum	spiny-sepaled button-celery	Dicots	PDAPI0Z0Y0	90	3	None	None	G2	S2	1B.2	null	Valley & foothill grassland, Vernal pool, Wetland
Euderma maculatum	spotted bat	Mammals	AMACC07010	68	1	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, WBWG_H-High Priority	null
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	293	3	None	None	G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, WBWG_H-High Priority	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	Riparian	CTT61420CA	68	1	None	None	G2	S2.2	null	null	Riparian forest
Imperata brevifolia	California satintail	Monocots	PMPOA3D020	32	1	None	None	G4	S3	2B.1	SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Coastal scrub, Meadow & seep, Mojavean desert scrub, Riparian scrub, Wetland
Leptosiphon serrulatus	Madera leptosiphon	Dicots	PDPLM09130	27	2	None	None	G3	S3	1B.2	USFS_S-Sensitive	Cismontane woodland,

												Lower montane coniferous forest
Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	432	14	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Lytta moesta	moestan blister beetle	Insects	IICOL4C020	12	1	None	None	G2	S2	null	null	Valley & foothill grassland
Lytta molesta	molestan blister beetle	Insects	IICOL4C030	17	2	None	None	G2	S2	null	null	Vernal pool, Wetland
Metapogon hurdi	Hurd's metapogon robberfly	Insects	IIDIP08010	3	1	None	None	G1G3	S1S3	null	null	Interior dunes
Mylopharodon conocephalus	hardhead	Fish	AFCJB25010	32	1	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Klamath/North coast flowing waters, Sacramento/San Joaquin flowing waters
Northern Claypan Vernal Pool	Northern Claypan Vernal Pool	Herbaceous	CTT44120CA	21	1	None	None	G1	S1.1	null	null	Vernal pool, Wetland
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	7	None	None	G3	S3.1	null	null	Vernal pool, Wetland
Nycticorax nycticorax	black-crowned night heron	Birds	ABNGA11010	26	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Riparian forest, Riparian woodland, Wetland
Orcuttia inaequalis	San Joaquin Valley Orcutt grass	Monocots	PMPOA4G060	45	8	Threatened	Endangered	G1	S1	1B.1	null	Vernal pool, Wetland
Orcuttia pilosa	hairy Orcutt grass	Monocots	PMPOA4G040	33	3	Endangered	Endangered	G1	S1	1B.1	null	Vernal pool, Wetland
Perognathus inornatus	San Joaquin Pocket Mouse	Mammals	AMAFD01060	122	2	None	None	G2G3	S2S3	null	BLM_S-Sensitive	Cismontane woodland, Mojavean desert scrub, Valley & foothill grassland
Phalacrocorax auritus	double-crested cormorant	Birds	ABNFD01020	38	1	None	None	G5	S4	null	CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	754	1	None	None	G3G4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Pseudobahia bahiifolia	Hartweg's golden sunburst	Dicots	PDAST7P010	27	5	Endangered	Endangered	G2	S2	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Cismontane woodland, Valley & foothill grassland
Sagittaria sanfordii	Sanford's arrowhead	Monocots	PMALI040Q0	93	6	None	None	G3	S3	1B.2	BLM_S-Sensitive	Marsh & swamp, Wetland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	450	18	None	None	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Sycamore Alluvial Woodland	Sycamore Alluvial Woodland	Riparian	CTT62100CA	17	1	None	None	G1	S1.1	null	null	Riparian woodland
Taxidea taxus	American badger	Mammals	AMAJF04010	533	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved

												upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Tropidocarpum capparideum	caper-fruited tropidocarpum	Dicots	PDBRA2R010	18	1	None	None	G1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Valley & foothill grassland
Tuctoria greenei	Greene's tuctoria	Monocots	PMPOA6N010	48	1	Endangered	Rare	G1	S1	1B.1	null	Vernal pool, Wetland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	474	2	Endangered	Endangered	G5T2	S2	null	IUCN_NT-Near Threatened, NABCI_YWL-Yellow Watch List	Riparian forest, Riparian scrub, Riparian woodland
Vulpes macrotis mutica	San Joaquin kit fox	Mammals	AMAJA03041	981	1	Endangered	Threatened	G4T2	S2	null	null	Chenopod scrub, Valley & foothill grassland

Appendix D
Native American Consultation

Kathy Anderson

From: Kathy Anderson
Sent: Monday, February 06, 2017 11:08 AM
To: 'NAHC NAHC'
Subject: SLF check and AB52 and Section 106 contact list Fresno NESWTF Storage Tank
Attachments: Site Layout 6 MG Tank.pdf

Dear Ms Pilas Treadway,

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). The City of Fresno's existing 30 million gallons per day (mgd) Northeast Surface Water Treatment Facility (NESWTF) has an existing 1.5 million gallon (MG) water storage tank for holding treated water to be pumped into the water distribution system. The size of the existing tank is not sufficient to maximize the use of the NESWTF and to reduce the need for groundwater under high demand conditions. In order to meet the water quality requirements, customer demands, and reduce the use of groundwater, the City will install a new, additional 6 MG tank to provide a total of 7.5 MG of storage capacity at the NESWTF. The City of Fresno's existing 30 million gallons per day (mgd) Northeast Surface Water Treatment Facility (NESWTF) has an existing 1.5 million gallon (MG) water storage tank for holding treated water to be pumped into the water distribution system. The size of the existing tank is not sufficient to maximize the use of the NESWTF and to reduce the need for groundwater under high demand conditions. In order to meet the water quality requirements, customer demands, and reduce the use of groundwater, the City will install a new, additional 6 MG tank to provide a total of 7.5 MG of storage capacity at the NESWTF (see attached figure).
I
In an effort to provide an adequate appraisal of all potential impacts that may result from the proposed project, ESA is requesting that a search be conducted of the sacred lands files and records of traditional cultural properties that may exist within or adjacent to the project area. For the purposes of Assembly Bill 52 and Section 106 consultation, we also request a list of Native American individuals/organizations that may have knowledge of cultural resources in the project area.

Thank you for your time and cooperation regarding this matter. Please contact me if you have any questions.

Kathy Anderson

Katherine Anderson, MA
Senior Historian
ESA | Cultural Resources
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Sacramento, CA 95816
916.564.4500 main | 916.564.4501 fax
kanderson@esassoc.com | www.esassoc.com
Follow us on Facebook | Twitter | LinkedIn

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
Fax (916) 373-5471

February 9, 2017

Katherine Anderson
ESA

Sent by Email: kanderson@esassoc.com

RE: Proposed Fresno NESWTF Storage Tank Project, City of Fresno; Fresno County, California

Dear Ms. Anderson:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
for Associate Governmental Program Analyst

Native American Heritage Commission
Tribal Contact List
Fresno County
2/8/2017

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio Street
Bakersfield, CA, 93305
Phone: (626)339-6785
deedominguez@juno.com

Kitanemuk
Southern Valley
Yokut

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA, 95236
Phone: (209)887-3415
canutes@verizon.net

Costanoan
Northern Valley
Yokut

Santa Rosa Rancheria Tachi Yokut Tribe
Rueben Barrios, Chairperson
P.O. Box 8
Lemoore, CA, 93245
Phone: (559)924-1278
Fax: (559)924-3583

Southern Valley
Yokut

Southern Sierra Miwuk Nation
Lois Martin, Chairperson
P.O. Box 186
Mariposa, CA, 95338
Phone: (209)742-6867

Miwok
Northern Valley
Yokut
Paiute

Table Mountain Rancheria
Leanne Walker-Grant, Chairperson
P.O. Box 410
Friant, CA, 93626
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Fax: (559)822-2693

Yokut

Table Mountain Rancheria
Bob Pennell, Cultural Resource Director
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Fax: (559) 325-0394
rpennell@tmr.org

Yokut

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, CA, 93258
Phone: (559) 781 - 4271
Fax: (559) 781-4610
neil.peyron@tulerivertribe-nsn.gov

Yokut

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
P. O. Box 589
Porterville, CA, 93258
Phone: (559) 783 - 8892
Fax: (559) 783-8932
joey.garfield@tulerivertribe-nsn.gov

Yokut

Tule River Indian Tribe
Kerri Vera, Environmental Department
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Fax: (559) 783-8932
kerri.vera@tulerivertribe-nsn.gov

Yokut

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fresno NESWTF Storage Tank Project, Fresno County.

2600 Capitol Ave
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February 10, 2017

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio St
Bakersfield CA, 93305

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Chairperson Dominguez:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

The City of Fresno's existing 30 million gallons per day (mgd) NESWTF has an existing 1.5 million gallon (MG) water storage tank for holding treated water to be pumped into the water distribution system. The size of the existing tank is not sufficient to maximize the use of the NESWTF and to reduce the need for groundwater under high demand conditions. In order to meet the water quality requirements, customer demands, and reduce the use of groundwater, the City will install a new, additional 6 MG tank to provide a total of 7.5 MG of storage capacity at the NESWTF (see attached figure).

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Ground disturbing construction activities will include the following:

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In an effort to address any potential impact to archaeological or ethnographic resources, we are seeking comments from Native American representatives; your name was supplied to us by the Native American Heritage Commission as a contact for this area for the purposes of AB 52 consultation. We would appreciate your comments identifying any concerns or issues pertinent to this project.

Thank you for your time and cooperation regarding this matter. Please contact either myself or Douglas Hahn with the City of Fresno at 559-621-1607, Doug.Hahn@fresno.gov if you have any questions.

Sincerely,

Katherine Anderson, Senior Historian
Attachment

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February 10, 2017

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
PO Box 717
Linden, CA 95236

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Chairperson Perez:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Katherine Anderson, Senior Historian
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February 10, 2017

Santa Rosa Rancheria Tachi Yokut Tribe
Rueben Barrios, Chairperson
PO Box 8
Lemoore, CA 93245

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Chairperson Barrios:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Sincerely,

Katherine Anderson, Senior Historian
Attachment

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February 10, 2017

Southern Sierra Miwuk Nation
Lois Martin, Chairperson
PO Box 186
Mariposa, CA 95338

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Chairperson Martin:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Katherine Anderson, Senior Historian
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February 10, 2017

Table Mountain Rancheria
Leanne Walker-Grant, Chairperson
PO Box 410
Friant, CA 93626

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Chairperson Walker-Grant:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Sincerely,

Katherine Anderson, Senior Historian
Attachment

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February 10, 2017

Table Mountain Rancheria
Bob Pennell, Cultural Resources Director
PO Box 410
Friant, CA 93626

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Mr. Pennell:

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Sincerely,

Katherine Anderson, Senior Historian
Attachment

2600 Capitol Ave
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February 10, 2017

Tule River Indian Tribe
Neil Peyron, Chairperson
PO Box 589
Porterville, CA 93258

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Chairperson Peyron:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Sincerely,

Katherine Anderson, Senior Historian
Attachment

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Suite 200
Sacramento, CA 95816
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916.564.4501 fax

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February 10, 2017

Tule River Indian Tribe
Joey Garfield, Tribal Archaeologist
PO Box 589
Porterville, CA 93258

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Mr. Garfield:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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In an effort to address any potential impact to archaeological or ethnographic resources, we are seeking comments from Native American representatives; your name was supplied to us by the Native American Heritage Commission as a contact for this area for the purposes of AB 52 consultation. We would appreciate your comments identifying any concerns or issues pertinent to this project.

Thank you for your time and cooperation regarding this matter. Please contact either myself or Douglas Hahn with the City of Fresno at 559-621-1607, Doug.Hahn@fresno.gov if you have any questions.

Sincerely,

Katherine Anderson, Senior Historian
Attachment

2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 phone
916.564.4501 fax

www.esassoc.com

February 10, 2017

Tule River Indian Tribe
Kerri Vera, Environmental Department
PO Box 589
Porterville, CA 93258

Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)

Dear Ms. Vera:

ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Sincerely,

Katherine Anderson, Senior Historian
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City, State, ZIP+4: Mariposa, CA 95338

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Sent To: Neil Peyron
Street & Apt. No., or PO Box No.: PO Box 589
City, State, ZIP+4: Porterville, CA 93258

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Sent To: Bob Pennell
Street, Apt. No.; or PO Box No.: PO Box 410
City, State, ZIP+4: Friant, CA 93626

PS Form 3800, August 2006 — See Reverse for Instructions

Kathy Anderson

From: Kathy Anderson
Sent: Tuesday, February 28, 2017 11:37 AM
To: 'deedominguez@juno.com'
Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)
Attachments: Site Layout 6 MG Tank.pdf

Dear Chairperson Dominguez,

This email is a follow up to the letter sent to you February 10, 2017. ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Thank you for your time and cooperation regarding this matter. Please contact either myself or Douglas Hahn with the City of Fresno at 559-621-1607, Doug.Hahn@fresno.gov if you have any questions.

Sincerely,

Katherine Anderson

Senior Historian
ESA | Cultural Resources

2600 Capitol Avenue, Suite 200
Sacramento, CA 95816
916.564.4500 main | 916.564.4501 fax
kanderson@esassoc.com | www.esassoc.com
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Kathy Anderson

From: Kathy Anderson
Sent: Tuesday, February 28, 2017 11:19 AM
To: 'rpennell@tmr.org'
Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)
Attachments: Site Layout 6 MG Tank.pdf

Dear Mr. Pennell,

This email is a follow up to the letter sent to you February 10, 2017. ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Senior Historian
ESA | Cultural Resources
2600 Capitol Avenue, Suite 200

Sacramento, CA 95816
916.564.4500 main | 916.564.4501 fax
kanderson@esassoc.com | www.esassoc.com
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Kathy Anderson

From: Kathy Anderson
Sent: Tuesday, February 28, 2017 11:18 AM
To: 'Katherine Perez'
Subject: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)
Attachments: Site Layout 6 MG Tank.pdf

Dear Chairperson Perez,

This email is a follow up to the letter sent to you February 10, 2017. ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Sincerely,

Katherine Anderson

Senior Historian
ESA | Cultural Resources
2600 Capitol Avenue, Suite 200

Sacramento, CA 95816
916.564.4500 main | 916.564.4501 fax
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Kathy Anderson

From: Kathy Anderson
Sent: Tuesday, February 28, 2017 11:21 AM
To: 'neil.peyron@tulerivertribe-nsn.gov'
Cc: 'joey.garfield@tulerivertribe-nsn.gov'; 'kerri.vera@tulerivertribe-nsn.gov'
Subject: FW: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno; Fresno County (Project No. 208754.02)
Attachments: Site Layout 6 MG Tank.pdf

Dear Chairperson Peyron,

This email is a follow up to the letter sent to you February 10, 2017. ESA is conducting environmental studies for the Fresno NESWTF Storage Tank, Fresno, Fresno County. The project is located on the Friant USGS 7.5' Quad in Fresno County; T/R/Section 12S/20E/Sec13 (See attached map). As part of ongoing water infrastructure improvements, the City of Fresno previously analyzed improvements to its Northeast Surface Water Treatment Facility (NESWTF) at 10120 N Chestnut Avenue under the Fresno Metro Water Resource Master Plan Updates (Clearinghouse No. 2013091021). Archival review and field survey completed as a part of that project identified no cultural resources within the NESWTF boundary of vicinity. The City, however, has subsequently identified the need for increased water storage on the site, and proposes the implementation changes to the proposed design of the holding tank and overflow pond (see attached).

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Thank you for your time and cooperation regarding this matter. Please contact either myself or Douglas Hahn with the City of Fresno at 559-621-1607, Doug.Hahn@fresno.gov if you have any questions.

Sincerely,

Katherine Anderson

Senior Historian

ESA | Cultural Resources
2600 Capitol Avenue, Suite 200
Sacramento, CA 95816
916.564.4500 main | 916.564.4501 fax
kanderson@esassoc.com | www.esassoc.com
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TABLE MOUNTAIN RANCHERIA
TRIBAL GOVERNMENT OFFICE

CERTIFIED 7522 9883

February 27, 2017

Katherine Anderson, Senior Historian
ESA
2600 Capitol Ave., Suite 200
Sacramento, Ca. 95816

RE: Proposed Fresno NE SWTF Storage Tank Project, City of Fresno, Fresno County, Project No. 208754.02

Dear: Katherine Anderson

This is in response to your letter dated, February 10, 2017, regarding, Proposed Fresno NE SWTF Storage Tank Project, City of Fresno, Fresno County, Project No. 208754.02. Thank you for notifying us of the potential development and the request for consultation.

We decline participation at this time but would appreciate being notified in the unlikely event that cultural resources are identified.

Sincerely,

Robert Pennell
Tribal Cultural Resources Director
rpennell@tmr.org
559.325.0351

23736
Sky Harbour Road
Post Office
Box 410
Friant
California
93626
(559) 822-2587
Fax
(559) 822-2693

Kathy Anderson

From: Doug Hahn <Doug.Hahn@fresno.gov>
Sent: Wednesday, March 08, 2017 10:18 AM
To: Kathy Anderson
Cc: Todd Gordon
Subject: FW: Proposed Storage Tank Project, Fresno Co.

fyi

Douglas Hahn
CH2M
Recharge Fresno Program | Permitting/Real Estate
desk | 559.621.1607
mobile | 719.216.4213
Douglas.Hahn@ch2m.com
Doug.Hahn@fresno.gov

From: Kerri Vera [mailto:tuleriverenv@yahoo.com]
Sent: Wednesday, March 08, 2017 10:13 AM
To: Doug Hahn <Doug.Hahn@fresno.gov>
Cc: Felix Christman <tuleriverarchmon1@gmail.com>
Subject: Proposed Storage Tank Project, Fresno Co.

Dear Mr. Doug Hahn

I'm writing on behalf of Kerr Vera, Director of the Tule River Tribe's Department of Environmental Protection. Thank you for your letter regarding the Proposed Storage Tank Project (No. 208754.02) in Fresno County.

The area is which the project is located, is in close proximity to the Table Mt. Rancheria and is within their immediate area of interest. As such, we will defer communication and consult them for matters pertaining to this project.

If, however, at any time you are unable to communicate or receive necessary consult from the Table Mt. Rancheria, Please reach to us once again.

Again, thank you for your communication efforts.

Respectfully,

Kerri Vera
Director
Department of Environmental Protection
Tule River Tribe

POB 589, Porterville CA 93257
ph(1): 559/783-8892
ph(2): 559/783-9984
fax: 559/783-8932
email(1): tuleriverenv@yahoo.com

email(2): kerri.vera@tulerivertribe-nsn.gov

TABLE 1

FRESNO NESWTF PROJECT, CITY OF FRESNO,

NATIVE AMERICAN CONSULTATION (AS OF 03/08/17)

Name/Organization	Date(s) Contacted	Method of Contact	Response
Debbie Pilas-Treadway, Native American Heritage Commission		Email	Original email request submitted February 6, 2017. Fax received February 9, 2017. SLF check indicated no potential cultural resources. Also included list of 9 tribes and individuals to be contacted.
Kitanemuk & Yowlumne Tejon Indians Delia Dominguez, Chairperson 115 Radio St Bakersfield CA, 93305 626-339-6785 deedominguez@juno.com	February 10, 2017; February 28, 2017	Certified Letter; email; phone call	Letter sent by mail February 10, 2017. Follow up email sent on February 28, 2017, email rejected due to full inbox. Follow up phone call made, left message on voicemail. No response yet received.
North Valley Yokuts Tribe Katherine Erolinda Perez, Chairperson PO Box 717 Linden, CA 95236 209-887-3415 canutes@verizon.net	February 10, 2017; February 28, 2017	Certified Letter; email	Letter sent by mail February 10, 2017. Follow up email sent on February 28, 2017. No response yet received.
Santa Rosa Rancheria Tachi Yokut Tribe Rueben Barrios, Chairperson PO Box 8 Lemoore, CA 93245 559-924-1278	February 10, 2017; February 28, 2017	Certified Letter; phone call	Letter sent by mail February 10, 2017. Follow up phone call made, left message on voicemail. No response yet received.
Southern Sierra Miwuk Nation Lois Martin, Chairperson PO Box 186 Mariposa, CA 95338 209-742-6867	February 10, 2017; February 28, 2017	Certified Letter; phone call	Letter sent by mail February 10, 2017. Follow up phone call made, left message on voicemail. No response yet received.
Table Mountain Rancheria Bob Pennell, Cultural Resources Director P.O. Box 410 Friant, CA 93626 559-325-0351 rpennell@tmr.org	February 10, 2017; February 28, 2017; March 6, 2017	Certified Letter; email; Certified Letter	Letter sent by mail February 10, 2017. Follow up email sent on February 28, 2017. Certified letter received from tribe on March 6, 2017, stating that they decline to participate at this time, but would appreciate being notified in the unlikely event that cultural resources are identified.
Table Mountain Rancheria Leanne Walker-Grant, Chairperson P.O. Box 410 Friant, CA 93626 559-882-2587	February 10, 2017	Certified Letter	Letter sent by mail February 10, 2017. Phone call attempted, phone no longer in service.
Tule River Indian Tribe Neil Peyron, Chairperson PO Box 589 Porterville, CA 93258 559-781-4271 neil.peyron@tulerivertribe-nsn.gov	February 10, 2017; February 28, 2017	Certified Letter; email	Letter sent by mail February 10, 2017. Follow up email sent on February 28, 2017. No response yet received.
Tule River Indian Tribe Joey Garfield, Tribal Archaeologist PO Box 589 Porterville, CA 93258 559-783-8892 joey.garfield@tulerivertribe-nsn.gov	February 10, 2017; February 28, 2017	Certified Letter; email	Letter sent by mail February 10, 2017. Follow up email sent on February 28, 2017. No response yet received.
Tule River Indian Tribe Kerri Vera, Environmental Department PO Box 589 Porterville, CA 93258 559-783-8892 kerri.vera@tulerivertribe-nsn.gov	February 10, 2017; February 28, 2017	Certified Letter; email	Letter sent by mail February 10, 2017. Follow up email sent on February 28, 2017. Email response received by City March 8, 2017, deferring communication and consultation to TMR.