City of Dixon Wastewater Treatment Facility Expansion Project

CEQA Initial Study/Mitigated Negative Declaration

November 2023

Prepared for:

City of Dixon

Prepared by:

Stantec Consulting Services Inc.

Project Number:

184032271

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Abbreviations

ACM	asbestos containing material
ADWF	average dry weather flow
APE	area of potential effect
BMP	best management practice
CAP	Climate Action Plan
CARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
Caltrans	California Department of Transportation
CalEEMod	California Emissions Estimator Model
CEC	California Energy Commission
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CH_4	Methane
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
COF	California Oak Foundation
CRHR	California Register of Historical Resources
CWA	Clean Water Act
DPM	diesel particulate matter
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
GCSD	General Construction Stormwater Discharge
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
HP	horsepower
ISMND	Initial Study/Mitigated Negative Declaration

LBP	lead-based paint
LUCP	Land Use Compatibility Plan
MBTA	Migratory Bird Treaty Act
Mgal/d	million gallons per day
MRZ	mineral resource zone
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NF_3	nitrogen trifluoride
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO_2	nitrogen dioxide
N_2O	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
O_3	ozone
PFC	perfluorocarbon
PG&E	Pacific Gas & Electric Company
$PM_{2.5}$	particulate matter less than 2.5 micrometers in diameter
PM_{10}	particulate matter less than 10 micrometers in diameter
PRC	Public Resources Code
Project	City of Dixon's Wastewater Treatment Facility Expansion Project
ROG	reactive organic gases
RAS	return activated sludge
RPS	Renewable Portfolio Standard
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SCWA	Solano County Water Agency
SF_6	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SPCCP	Spill Prevention Control and Countermeasure Plan
SRA	State Responsibility Areas
SVAB	Sacramento Valley Air Basin

Stantec	Stantec Consulting Services Inc.
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USACE	United States Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WWTF	wastewater treatment facility
YSAQMD	Yolo-Solano Air Quality Management District

1.0 Introduction

The City of Dixon owns and operates a wastewater treatment facility (WWTF) and associated disposal facilities that serve residences and businesses within the city's service area. Wastewater generated within the service area is conveyed to the WWTF. The purpose of the City of Dixon's WWTF Expansion Project (Project) is to modify the existing WWTF to accommodate city growth for committed and future development within the service area based on the land use designations identified in the updated City of Dixon 2040 General Plan.

This Initial Study/Mitigated Negative Declaration (ISMND) has been prepared to evaluate and describe the Project for potential environmental effects in compliance with the California Environmental Quality Act (CEQA). The City of Dixon is the Lead Agency under CEQA and has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment. This ISMND includes an Initial Study to determine whether any potential environmental effects from project activities would be significant, and a Mitigated Negative Declaration that states that all potentially significant impacts from implementing the Project can be mitigated to less-than-significant levels. This document has been prepared in accordance with CEQA, Public Resources Code (PRC) Section 21000 et seq., and the State CEQA Guidelines, California Code of Regulations, Title 14, Section 15000 et seq.

1.1 Project Title

City of Dixon WWTF Expansion Project

1.2 Lead Agency

City of Dixon
Engineering/Utilities Department
City Hall
600 East A Street
Dixon, CA 95620

1.3 Lead Agency Contact

Contact: Brandon Rodriguez, City of Dixon Senior Civil Engineer
Email: brodriguez@cityofdixon.us
Phone: (707) 678-7030, extension 5303

1.4 Project Location

The Project is in the City of Dixon, southeast of the city center, in northeast Solano County as depicted in Figure 1-1, and the location of the Project is depicted in Figure 1- 2. The Project is located within the existing City of Dixon WWTF boundary along Pedrick Road and the existing WWTF Disposal Area southeast of the WWTF. The Project is located between 39 to 42 feet in elevation above mean sea level.

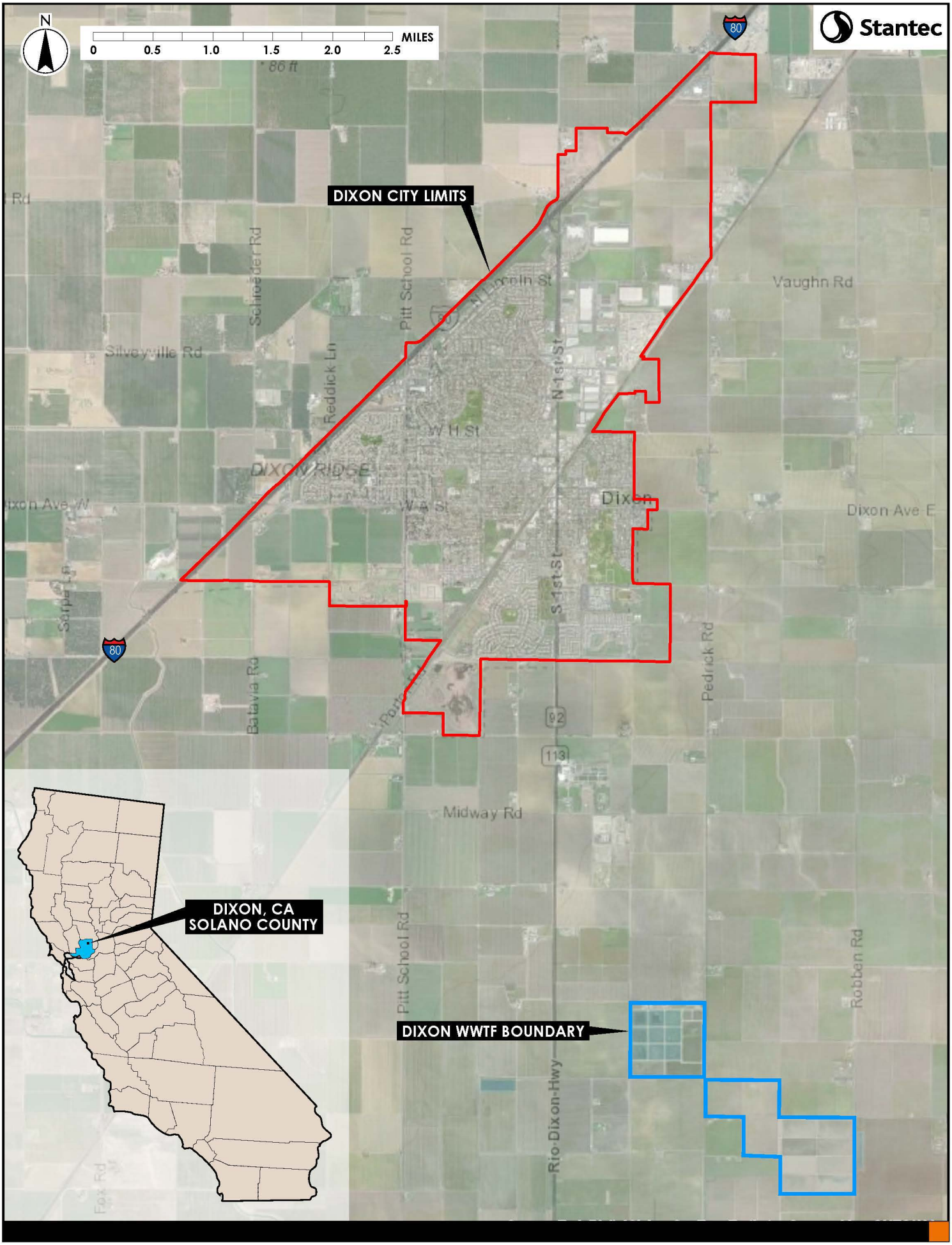

Figure 1-1
Project Vicinity

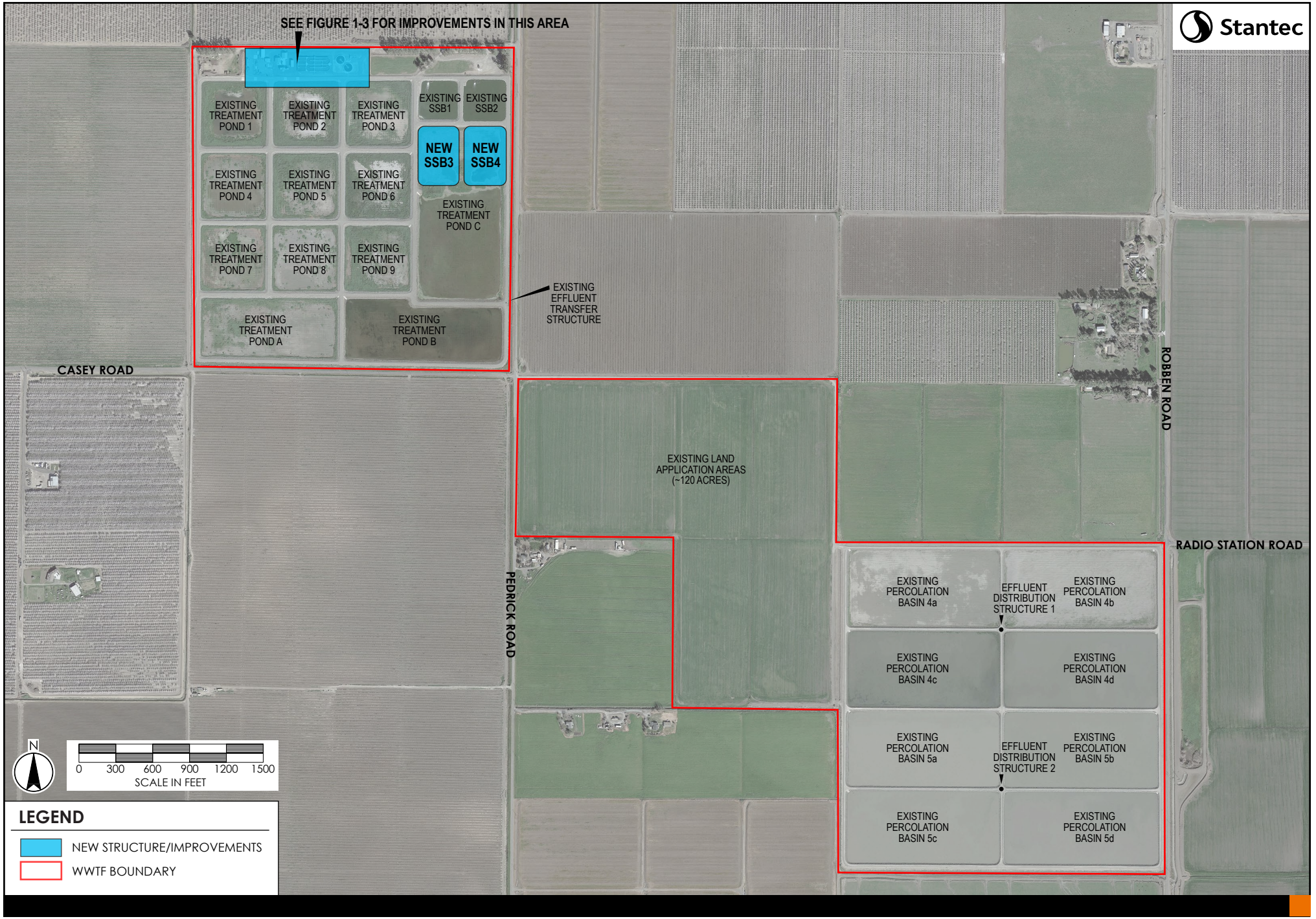

Figure 1-2
Project Location

1.5 General Plan Designation and Zoning

City of Dixon 2040 General Plan: Public Facilities

1.6 Surrounding Land Use and Setting

Surrounding land uses and setting to the project area are generally designated as agriculture.

1.7 CEQA and Agency Review

CEQA requires that project proponents disclose a proposed project's significant impacts to the environment. The intent of CEQA is to foster good planning and to consider environmental issues during the planning process. The City of Dixon is the Lead Agency under CEQA for the preparation of this ISMND. CEQA Guidelines (Section 21067) define the lead agency as, "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." Approval of the Project is considered a public agency discretionary action and, therefore, is subject to compliance with CEQA. As such, the City of Dixon has directed Stantec Consulting Services Inc. (Stantec) to prepare an analysis of the project environmental effects to comply with CEQA.

This document's purpose is to disclose to decision-makers and the public the environmental consequences of implementing the Project. The public, residents, and other local and state resource agencies will be given the opportunity to review and comment on this document during a 30-day public review period. Comments received during the review period will be considered by the City of Dixon prior to certification of this ISMND and Project approval.

The public review period will begin on November 3, 2023, and end on December 4, 2023, pursuant to CEQA Guidelines Section 15105. Written comments (including via email) must be received by 5:00 p.m. on December 4, 2023. Written comments should be addressed to the following, with "City of Dixon WWTF Expansion Project" in the subject line:

City of Dixon
Engineering/Utilities Department
City Hall
600 East A Street
Dixon, CA 95620
Email: brodriguez@cityofdixon.us

The ISMND and supporting documents are available at the 600 East A Street, Dixon, CA 95620.

1.8 Federal Funding

The Project is likely to receive federal funding creating a "federal nexus" which triggers a need for compliance with federal environmental laws such as the National Environmental Policy Act (NEPA). Federal funding for the Project would be awarded through the Clean Water State Revolving Fund Grant and Loan Program, which is administered by the California State Water Resources Control Board

(SWRCB) through the delegated authority of the Environmental Protection Agency (EPA). The EPA is the Federal Lead Agency and would follow the CEQA Plus/Federal Cross-Cutting Process for NEPA compliance to capitalize on existing CEQA documentation. Under their delegated authority, the SWRCB would verify compliance with all federal environmental regulations except the Federal Endangered Species Act (FESA) for which the EPA would be responsible to ensure verification of compliance. The CEQA Plus/Federal Cross-Cutting Process would rely on the information contained in this CEQA document to the extent feasible to support compliance with federal regulations.

2.0 Project Description

The City of Dixon previously upgraded the WWTF in 2017 under the City of Dixon Wastewater Treatment Facility Improvements Project. The 2017 upgrades were analyzed under a separate CEQA ISMND process (SCH#2014012034). The purpose of the 2017 WWTF project was to replace aged facilities with modern water treatment technologies, conserve water by minimizing water evaporation during treatment, improve water quality, and upgrade the WWTF to accommodate an average dry weather flow (ADWF) of 1.92 million gallons per day (Mgal/d). Since the 2017 WWTF upgrades, the City of Dixon 2040 General Plan (City of Dixon 2021) was updated and adopted in May 2021. The Project would expand the WWTF to meet the buildout capacity projections based on land use designations contemplated in the updated City of Dixon 2040 General Plan. The WWTF upgrades would occur within the existing WWTF footprint and would be designed to accommodate 3.3 Mgal/d ADWF (Figure 1-2 and 2-1).

2.1 Proposed Project Components

2.1.1 INFLUENT PUMP STATION AND HEADWORKS IMPROVEMENTS

The influent pump station must be upsized to have a reliable pump capacity that can handle the estimated future peak hour flow. This entails replacing the two small 15 horsepower (HP) pumps with two large 85 HP pumps and keeping two existing 35 HP pumps. In addition, the screen capacity and the grit removal systems would be upgraded to provide additional flow capacity. Last, the existing 10-inch magnetic flow meter would be upsized to 12-inches and would include modifications to the piping arrangement so that the flow meter would be downstream of the connection to the hydropneumatics tank.

2.1.2 SECONDARY TREATMENT

The existing secondary treatment system includes two oxidation ditches, two secondary clarifiers, and a Return Activated Sludge (RAS) pump station. The existing WWTF was designed with a capacity of 1.92 Mgal/d ADWF. Therefore, to meet the increased capacity of 3.3 Mgal/d ADWF, the following components would be upgraded:

- Add one oxidation ditch and one secondary clarifier, all equivalent in size to the existing units.
- Replace one existing blower with two larger blowers.
- Add three modulating valves, one to each oxidation ditch air header.
- Change the diffusers in the existing ditches.
- Add a new RAS pump similar to the existing pumps as the RAS pump station.

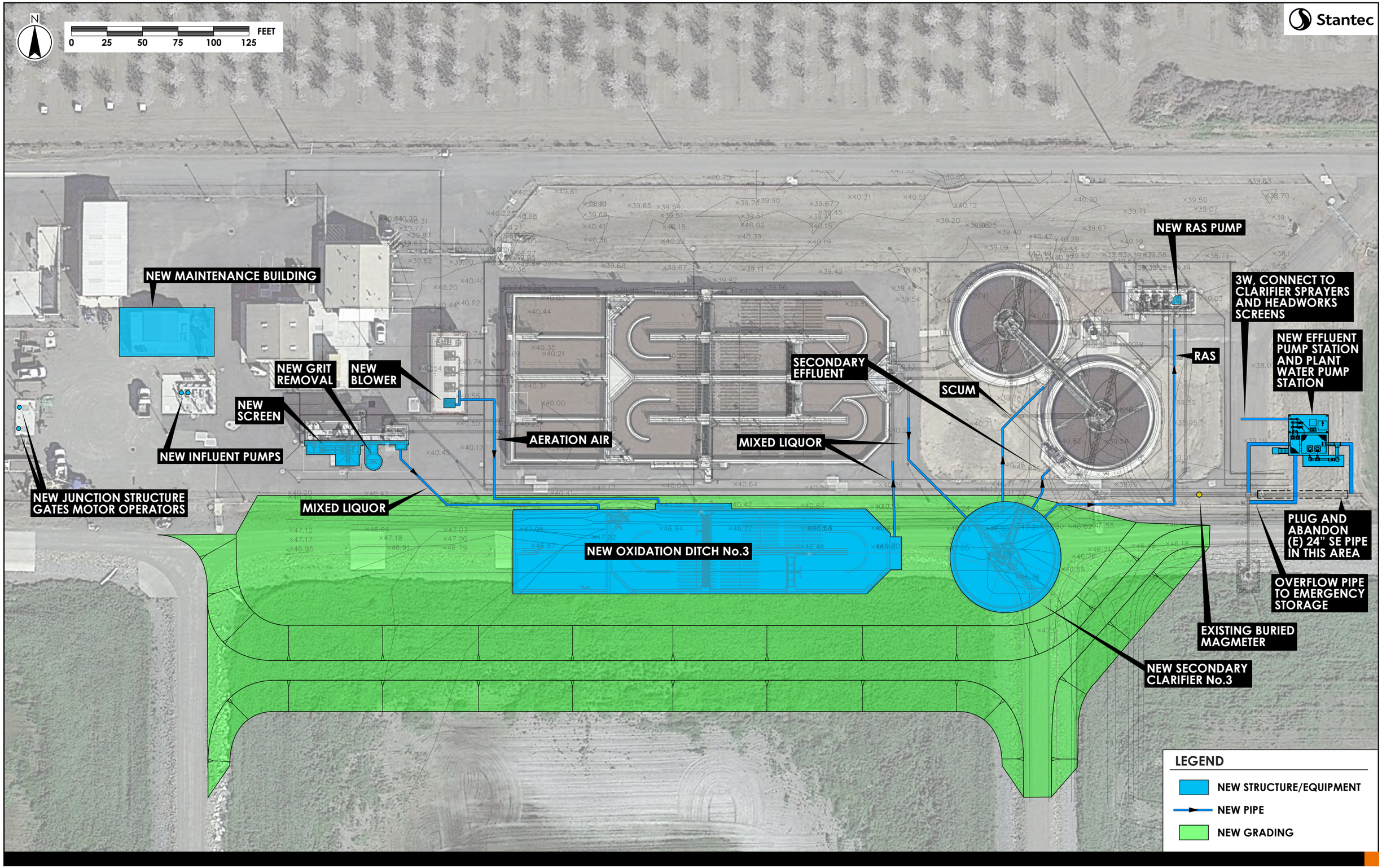

Figure 2-1
Dixon WWTF Expansion Project Site Layout (excluding SSB)

2.1.3 EFFLUENT PUMPING

The existing effluent system is not capable of processing the proposed expanded capacity of 3.3 Mgal/d ADWF. Therefore, the city proposes to install a secondary effluent pump station. The effluent pump station would be located east of Secondary Clarifier 2. The pump station would have a wet well and two vertical turbine pumps (one duty and one stand by) that would be used when gravity flow is not possible. Each pump would have a capacity of 7.5 Mgal/d and would have a 100-HP motor.

2.1.4 EFFLUENT PIPING

The existing two-mile long effluent pipeline, which carries effluent from the treatment processes to the disposal percolation ponds, has manholes, cleanouts, and appurtenances that are not capable of withstanding pressurization from the new effluent pump station. The Project would upgrade the effluent pipeline and appurtenances to allow continuous operation under pressure.

2.1.5 SOLIDS HANDLING

The city proposes to install two new solids stabilization basins, similar to the existing basins, as shown in Figure 2-1. The new basins are slightly larger than the existing basins, to keep the volatile solids loading rates below recommended limits and reduce odor potential.

2.1.6 PLANT WATER DESIGN

City water is used to provide wash water to the plant hose bibs, influent screens, and secondary clarifier surface spray system. The city water is potable water, a valuable resource that needs to be conserved and is expensive for its intended use. Therefore, the following upgrades to the plant water system would occur:

- Install two vertical turbine 100 gallons per minute pumps in the wet well of the effluent pump station.
- Install two filters, each is capable of filtering 100 gallons per minute.
- Install two 120-gallon tanks for sodium hypochlorite storage.
- Install two peristaltic pumps (0.1 to 2 gallons per hour) to dose sodium hypochlorite.
- Install an inline static mixer to mix sodium hypochlorite to filtered plant water.
- Install one 500-gallon hydro-pneumatic tank.

2.1.7 MAINTENANCE BUILDING

The original plant design included a new maintenance building, but the building was not constructed due to financial constraints. With this expansion project, additional maintenance space would be needed. The Project would include a new four bay maintenance building as a part of the Project. The maintenance building would be on the north side of the Influent Pump Station and west of the Electrical Building. The

new maintenance building would have four 14 feet high by 12 feet wide motorized roll up doors and man doors on both ends. One of the end bays would have an interior wall between bays and an inside door. The enclosed bay that would be used for pesticide/herbicide storage would have a shower/eye wash station. The building would have two vents (one with fan and thermostat) and a building alarm system.

2.2 Construction Activities and Schedule

The proposed construction activities include site preparation, demolition, grading, trenching, paving, building construction, and architectural coating. Typical construction equipment, such as excavators, backhoes, and dump trucks would be utilized for these activities. Access to the proposed project site and staging areas may occur along Pedrick Road, Casey Road, State Hwy 113, and Interstate Hwy 80. All construction impacts would be located within the existing WWTF footprint. Staging areas would be on previously disturbed areas of the existing WWTF. The total footprint for the Project occupies approximately 10 acres. Grading for installation of the new oxidation ditch and clarifier would occupy 2.5 acres located south of the existing WWTF facilities and extend into the existing treatment pond system. Construction is expected to occur toward the end of 2024 or in the spring of 2025 and would last approximately 24 months.

2.3 Operation

The city would continue to operate the WWTF to minimize cost and maximize efficiency**.** In general, operation and maintenance activities at the upgraded WWTF would be similar to existing activities. The WWTF expansion would result in additional energy usage; however, the modern facilities would be energy efficient and would increase water efficiency.

3.0 Impact Analysis

This ISMND uses the following terms to describe the level of significance of adverse impacts and these terms are defined as follows:

- **No Impact**: An impact that would result in no adverse changes to the environment.
- **Less-than-Significant Impact:** An impact that is potentially adverse but does not exceed the thresholds of significance as identified in the impact discussions. Less-than-significant impacts do not require mitigation.
- **Less than Significant with Mitigation:** An environmental effect that may cause a substantial adverse change in the environment without mitigation, but which is reduced to a level that is less than significant with mitigation identified in the Initial Study.
- **Potentially Significant Impact**: An environmental effect that may cause a substantial adverse change in the environment; either additional information is needed regarding the extent of the impact to make the significance determination, or the impact would or could cause a substantial adverse change in the environment. A finding of a potentially significant impact would result in the determination to prepare an Environmental Impact Report (EIR).

3.1 Aesthetics

3.1.1 ENVIRONMENTAL SETTING

Located in a primarily agricultural area of the City of Dixon in northeast Solano County, the proposed Wastewater Treatment Facility Improvements Project would take place within the existing City of Dixon WWTF (Photo 3-1, 3-2, 3-3).

Photo 3-1. Existing WWTF

Photo 3-2. Existing WWTF Ponds

Photo 3-3. WWTF Proposed Disturbance Area

3.1.2 REGULATORY SETTING

This section briefly describes applicable regulations pertaining to aesthetics and visual resources. The Project is located in the City of Dixon in Solano County. As a result, the various regulatory documents that govern each of these areas were each reviewed for goals, policies, and language relevant to this section.

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with… enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code Section 21001(b)).

3.1.2.1 State Regulations

3.1.2.1.1 California Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963 and is managed by the Landscape Architecture Division of the California Department of Transportation (Caltrans). Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view (Caltrans 2012).

3.1.2.2 Local Regulations

3.1.2.2.1 Solano County General Plan

The following policies from the Solano County General Plan are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Policy RS.P-36:** Support and encourage practices that reduce light pollution and preserve views of the night sky.
- **Policy RS.P-37:** Protect the visual character of designated scenic roadways.

3.1.2.2.2 City of Dixon General Plan

The City of Dixon 2040 General Plan (City of Dixon 2021) does not have any specific goals or policies addressing aesthetics resources that pertain to the Project.

3.1.3 IMPACT ANALYSIS

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

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

Finding: Less than Significant

According to the Caltrans California Scenic Highway Mapping System there are no officially designated or eligible State or County scenic highways in the project area (Caltrans 2018). The City of Dixon General Plan does not list any scenic vistas in the project area (City of Dixon 2021). The Solano County General Plan lists Hwy 80 and Hwy 113 as Scenic Roadways in Solano County (Solano County General Plan

2008). The Project is approximately four miles from Hwy 80 and a half mile from Highway 113. The project area is not visible from Hwy 80 but is visible from Hwy 113. The proposed WWTF improvements would not significantly change the current viewshed from Hwy 113 compared to the existing views of the WWTF. Therefore, the Project would not have a substantial adverse effect on any scenic vistas and impacts are considered less than significant.

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

Finding: Less than Significant

According to the Caltrans California Scenic Highway Mapping System there are no officially designated or eligible State or County scenic highways in the project area (Caltrans 2018). The City of Dixon General Plan does not list any scenic vistas in the project area (City of Dixon 2021). The Solano County General Plan lists Hwy 80 and Hwy 113 as Scenic Roadways in Solano County (Solano County General Plan 2008). The Project is approximately four miles from Hwy 80 and a half mile from Highway 113. The project area is not visible from Hwy 80 but is visible from Hwy 113. The Project would not significantly change the current viewshed from Hwy 113 compared to the existing views of the WWTF because new structures would be visually similar to the existing WWTF aesthetic. Therefore, the Project entails less-than-significant impacts to scenic resources within a state scenic highway.

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

Finding: Less than Significant with Mitigation

The Project is located within the boundaries of the existing City of Dixon WWTF and is surrounded by agriculture land. The Project involves improvements to the existing WWTF and these improvements would not substantially degrade the existing visual character or quality of the project area and its surroundings as the use of the project area would remain the same, a WWTF. There is potential for temporary visual impacts during construction. These impacts would be temporary (approximately 24 months) and would only be partially visible from the surrounding agriculture land within view of the project area. So that the Project does not substantially degrade the existing visual character or quality of the site and its surroundings once construction is complete, Mitigation Measures AES-1 and AES-2 (described below) would be implemented. Therefore, potential impacts to the aesthetic character of the area are considered less than significant with mitigation incorporated.

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

Finding: Less than Significant

Any new lighting associated with the WWTF improvements are not expected to be substantial and would be similar to lighting at the existing WWTF. Without proper design, however, newly introduced permanent lighting could result in nighttime glare and increase ambient lighting levels in the area. There are no city regulations that address excessive light glare. Construction lighting would result in temporarily increasing

the overall light levels in the vicinity. However, these impacts would diminish upon completion of project construction. Also, during project construction, there may be brief instances of glare produced by reflective surfaces on-site. These instances are not considered substantial, are of low frequency, and are temporary. Therefore, impacts are considered less than significant.

3.1.4 MITIGATION MEASURES

Mitigation Measure AES-1: Design the facility improvements to be aesthetically similar to the existing WWTF structures and minimize impacts to the adjacent areas.

The Project will adhere to the following design stipulations:

- Vegetation and tree clearing will be limited to the greatest extent feasible to that which is necessary to construct and maintain new facilities.
- New facilities should be designed to architecturally blend in (materials and colors) with existing facilities and structures within the project site.

Mitigation Measure AES-1 Implementation

- **Responsible Party:** City of Dixon will review the design drawings for consistency with the existing structures and to minimize impacts to vegetation.
- **Timing:** City of Dixon Project Manager will review the aesthetic consistency during the design phase of the Project.
- **Monitoring and Reporting Program:** Upon completion of design, the design drawings will be kept at the City of Dixon Engineering Department and WWTF.
- **Standards for Success:** The proposed WWTF structures match the existing WWTF infrastructure in terms of general size and appearance.

Mitigation Measure AES-2: Use Appropriate Soils and Revegetation

In areas requiring significant topographic adjustment, the exposed slopes will be stabilized per the recommendations of the civil engineer to allow for revegetation or other approved soil stabilization. If the proposed fill soil is not suitable for plant growth, topsoils will be specified and reapplied consistently across the new grades per the recommendations of a Certified Professional Soil Scientist and stabilized/replanted with a site specific hydroseed mix developed by a certified botanist or seed analyst, to allow for successful reestablishment of the slope with vegetation similar to that of the surrounding hillside.

Mitigation Measure AES-2 Implementation

- **Responsible Party**: City of Dixon.
- **Timing**: City of Dixon engineers and WWTF staff will work with the specified professionals during the design phase of the Project.
- **Monitoring and Reporting Program**: Upon completion of design, the design drawings will be kept at the City of Dixon office and the City of Dixon Project Manager will coordinate with the Contractor to provide proper implementation.
- **Standards for Success**: The areas of topographic adjustment and fill blend with the surrounding topography and are constructed with materials which allow for the successful reestablishment of the slopes with vegetation that matches that of the adjacent areas.

3.2 Agricultural and Forestry Resources

3.2.1 ENVIRONMENTAL SETTING

The lands surrounding the existing WWTF are primarily agricultural. These surrounding agricultural lands are designated as Prime Farmland with some properties adjacent to the WWTF under the Williamson Act (CDC 2022a). However, the proposed improvements to the WWTF would be confined within the existing WWTF boundaries.

3.2.2 REGULATORY SETTING

3.2.2.1 Federal Regulations

3.2.2.1.1 Farmland Protection Policy Act

The Farmland Protection Policy Act of 1981 [Sections 1539-1549 P.L. 97-98, Dec 22, 1981], requires the Secretary of Agriculture to establish and carry out a program to "minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to the extent practicable, would be compatible with state, unit of local government, and private programs and policies to protect farmland." [7 USC 4201-4209 & 7 USC 658].

3.2.2.1.2 Williamson Act

The California Land Conservation Act (Williamson Act) of 1965 is the state's principal policy for the "preservation of a maximum amount of the limited supply of agricultural land in the state" (Cal. Government Code Section 51220(a)). The purpose of the Williamson Act is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Williamson Act enables private landowners to contract with counties and cities to voluntarily restrict their land to agricultural and compatible open space uses. In return for this guarantee by landowners the government jurisdiction assesses taxes based on the agricultural value of the land rather than the market value, which typically results in a substantial reduction in property taxes.

3.2.2.2 Local Regulations

3.2.2.2.1 Solano County General Plan

The following goals and policies from the Solano County General Plan are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal AR.G-2:** Preserve and protect the county's agricultural lands as irreplaceable resources for present and future generations.
- **Goal AR.G-6:** Recognize, support, and sustain agricultural water resources for farmlands**.**
- **Policy AG.P-8:** Maintain water resource quality and quantity for the irrigation of productive farmland so as to prevent the loss of agriculture related to competition from urban water consumption internal or external to the county.
- **Policy AG.P-9:** Promote efficient management and use of agricultural water resources.
- **Policy AG.P-10:** Support efforts by irrigation districts and others to expand the county's irrigated agricultural areas where appropriate.

3.2.2.2.2 City of Dixon General Plan

- **Policy NE-1.1** Preserve the natural open space and agricultural lands that surround Dixon through continued leadership in cross-jurisdictional conservation initiatives such as the Vacaville-Dixon Greenbelt and the Davis-Dixon greenbelt.

3.2.3 IMPACT ANALYSIS

II. AGRICULTURAL AND FORESTRY RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X

II. AGRICULTURAL AND FORESTRY RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
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?				X

a) Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Finding: Less than Significant

The Project would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is classified primarily as Urban and Built-Up Land with a small area (approximately 40 acres of 444 acres) of the project area classified as Prime Farmland according to the Important Farmland Mapping and Monitoring Program (CDC 2022a). Urban and Built-Up Land is described as occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Prime Farmland is described as having the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date (CDC 2022a). project construction would be temporary in nature and no construction or impacts would occur in the area of Prime Farmland within the project area or convert that land to nonagricultural uses. Therefore, impacts are considered less than significant.

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

Finding: Less than Significant

The project area is currently designated as Public Facilities land by the City of Dixon General Plan (City of Dixon 2021) and Public/Quasi-Public land by Solano County General Plan (Solano County 2008). The project area is classified primarily as Urban and Built-Up Land and Non-Enrolled Land according to the most recent Williamson Act lands map published by the Department of Conservation in 2022. Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract and impacts are considered less than significant.

c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

Finding: No Impact

The proposed project site is currently designated as Public Facilities land by the City of Dixon General Plan (City of Dixon 2021) and Public/Quasi-Public land by the Solano County General Plan (Solano County 2008). The Project is not located on land zoned as forest or timber land and would not result in any conflict with existing zoning for forestry or timberland resources. Therefore, no impacts would occur.

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

Finding: No Impact

The proposed project site is currently designated as Public Facilities land by the City of Dixon General Plan (City of Dixon 2021) and Public/Quasi-Public land by the Solano County General Plan (Solano County 2008). Therefore, the Project is not located on forest land and would not result in any conversion of forestland to non-forestland uses. Therefore, no impacts would occur.

e) Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?

Finding: No Impact

The proposed project site is currently designated as Public Facilities land by the City of Dixon General Plan (City of Dixon 2021) and Public/Quasi-Public land by the Solano County General Plan (Solano County 2008). The project area is classified primarily as Urban and Built-Up Land with a small area (approximately 40 acres of 444 acres) of the project area classified as Prime Farmland according to the Important Farmland Mapping and Monitoring Program (CDC 2022a). The project construction would be temporary in nature and no construction or impacts would occur in the area of Prime Farmland within the project area or convert that land to nonagricultural uses. The entire project area is not registered under the Williamson Act based on a review of the most recent Williamson Act lands map published by the Department of Conservation in 2022. The Project would not involve any other changes in the existing environment that would result in conversion of farmland or forestland to nonagricultural or non-forest use. Therefore, no impacts would occur.

3.3 Air Quality

3.3.1 ENVIRONMENTAL SETTING

The project site lies within a portion of the Sacramento Valley Air Basin (SVAB) which is under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The climate of the SVAB is generally characterized by hot, dry summers and mild, rainy winters. The temperature ranges from 20 to 115 degrees Fahrenheit, with summer highs usually in the ’90s and winter lows occasionally below freezing. Average annual rainfall is about 20 inches, and the rainy season generally occurs from November through March. The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants under certain meteorological conditions. The highest frequency of air stagnation occurs

in the autumn and early winter when large high-pressure cells collect over the Sacramento Valley (YSAQMD 2007).

The U.S. Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) designate air basins where ambient air quality standards are exceeded as "non-attainment" areas. If standards are met, the area is designated as an "attainment" area. The attainment status is based on the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for identified criteria pollutants. Criteria air pollutants includes ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (measured both in units of smaller than 2.5 microns in diameter [$PM_{2.5}$] and in units of particulate matter smaller than 10 microns in diameter [PM_{10}]), and lead (Pb). The YSAQMD is designated as non-attainment for the federal and state ozone standards, the state standard for PM_{10}, and the federal standard for $PM_{2.5}$ (YSAQMD 2022a).

3.3.2 REGULATORY SETTING

Air quality within the project area is regulated by several jurisdictions, including the USEPA, CARB, and YSAQMD. The following regulations were considered when analyzing potential impacts related to air quality:

3.3.2.1 Federal Regulations

3.3.2.1.1 Federal Clean Air Act

The Federal Clean Air Act (FCAA) establishes the framework for modern air pollution control. The FCAA required the USEPA to establish NAAQS, and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions.

3.3.2.2 State Regulations

3.3.2.2.1 California Clean Air Act

The California Clean Air Act (CCAA) requires that all air districts in the state endeavor to achieve and maintain CAAQS for O_3, CO, SO_2, and NO_2 by the earliest practical date. The CCAA specifies that districts focus attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

3.3.2.2.2 California Air Resources Board

The CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the CCAA of 1988. Other CARB duties include monitoring air

quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts), establishing CAAQS, which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles.

3.3.2.3 Local Regulations

3.3.2.3.1 Yolo-Solano Air Quality Management District

The YSAQMD is the public agency entrusted with regulating stationary sources of air pollution in a portion of the SVAB, including the portion of Solano County where the Project is located. The YSAQMD has prepared their own guidance document to provide procedures for addressing air quality impacts in environmental documents (YSAQMD 2007). *The YSAQMD Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD Handbook) includes thresholds of significance and project screening levels for criteria pollutants (ROG [reactive organic gases], NO_X, PM_{10}, and CO), TACs, cumulative impacts, odors, and methods for assessing and mitigating impacts. The YSAQMD has adopted thresholds of significance for individual development projects are presented in Table 3.3-1. The thresholds apply to both construction and operational impacts.

Table 3.3-1. YSAQMD Significance Thresholds for Criteria Pollutants

Pollutant	Threshold of Significance
Reactive Organic Gases (ROG)	10 tons per year
NO_X	10 tons per year
PM_{10}	80 pounds per day

Source: Yolo-Solano Air Quality Management District Handbook for Assessing and Mitigating Air Quality Impacts (YSAQMD 2007)

In addition, all projects under the jurisdiction of the YSAQMD are required to comply with all applicable YSAQMD rules and regulations. Applicable YSAQMD regulations and rules include, but are not limited to, the following (YSAQMD 2022b):

- Regulation II: Prohibition, Exceptions
    - Rule 2.1: Control of Emissions
    - Rule 2.5: Nuisance
    - Rule 2.11: Particulate Matter Concentration
- Regulation III: Permit System
    - Rule 3.1: General Permit Requirements
    - Rule 3.4: New Source Review
    - Rule 3.13: Toxics New Source Review

As a non-attainment area for the federal ozone standard, the Sacramento region is required to prepare various planning documents on an ongoing basis. Each time a new standard is adopted by USEPA, local air districts must prepare plans to show how the standard would be achieved by the appropriate deadline. The most recent federal ozone attainment plan is the *Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2017 Ozone Plan) (SMAQMD 2017). The CCAA also requires the submission of a plan for attaining and maintaining CAAQS for ozone with subsequent updates every three years. The most recently adopted plan, *Triennial Assessment and Plan Update* covers the years 2015 through 2017 (YSAQMD 2019).

3.3.2.3.2 Solano County General Plan

The following goals and policy from the Solano County General Plan are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal HS.G-2:** Improve air quality in Solano County, and by doing so; contribute to improved air quality in the region.
- **Goal HS.G-4:** Protect important agricultural, commercial, and industrial uses in Solano County from encroachment by land uses sensitive to noise and air quality impacts.
- **Policy HS.P-44:** Minimize health impacts from sources of toxic air contaminants, both stationary (e.g., refineries, manufacturing plants) as well as mobile sources (e.g., freeways, rail yards, commercial trucking operations).

City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) includes the following goals, policies, and action items related to air quality that may be applicable to the Project:

- **Policy NE-4.24**: Look for opportunities to ensure that workers in outdoor industries have the training and resources to be adequately protected from environmental hazards, including extreme heat, poor air quality, pests, and diseases.
- **Action NE-4.E**: Coordinate with Solano County Public Health to provide health resources to help residents respond to poor air quality and high heat events.
- **Goal NE-5:** Minimize air, soil, noise, and water pollution as well as community exposure to hazardous conditions.
- **Policy NE-5.1:** Coordinate with the Yolo-Solano Air Quality Management District and other local, regional, and state agencies to protect and enhance air quality in Dixon.
- **Policy NE-5.2:** Continue to use the Yolo-Solano Air Quality Management District's Handbook for Assessing and Mitigating Air Quality Impacts for environmental review of proposed development projects.

- **Policy NE-5.3:** Require dust abatement actions for all new construction and redevelopment projects, consistent with the Yolo-Solano Air Quality Management District's Best Available Control Measures.
- **Policy NE-5.4**: Ensure adequate buffer distances are provided between offensive odor sources and sensitive receptors, such as schools, hospitals, and community centers.

3.3.3 IMPACT ANALYSIS

Potential impacts associated with the Project and, if warranted, the mitigation measures required to reduce impacts to a less-than-significant level, are discussed below.

3.3.3.1 Methodology

The California Emissions Estimator Model (CalEEMod) Version 2022.1.1.20 was used to estimate construction and operational impacts of the Project (Appendix A). CalEEMod quantifies direct emissions, such as construction and operational activities and vehicle use, as well as indirect emissions, such as building energy use and water use. Default data (e.g., emission factors, trip lengths, meteorology, source inventory) have been provided by the various California Air Districts to account for local requirements and conditions. Project-specific information was input into the model when available.

Construction was assumed to begin in 2024 and take place over approximately one to two years. During the demolition phase, approximately 700 tons of debris (1,000 cubic yards [CY]) would be removed from the site. During site preparation, it was assumed that approximately 26,000 CY of material would be imported, and 10,000 CY would be exported from the site. All off-road equipment types and construction trips were left as model defaults.

To evaluate operations, only net new emissions were considered in this analysis. Accordingly, the energy use was updated to reflect the new electric equipment that would be used on-site. The trip generation rates were left as model defaults to conservatively represent any new employees that would visit the site as a result of the Project.

3.3.3.2 Results

Construction emissions associated with the Project are shown in Table 3.3-2, and operational emissions are shown in Table 3.3-3. As shown in the tables, emissions during both construction and operations would be below the applicable YSAQMD thresholds.

Table 3.3-2. Project Construction Criteria Pollutant Emissions

Year	ROG (tons per year)	NOx (tons per year)	PM_{10} (maximum pounds per day)
2024	0.18	1.75	30.07
2025	0.05	0.30	2.53
YSAQMD Thresholds	**10 tons per year**	**10 tons per year**	**80 pounds per day**
Exceed Thresholds?	No	No	No

Source: Air Quality and Greenhouse Gas Modeling Results (Appendix A)

Table 3.3-3. Project Operational Criteria Pollutant Emissions

Year	ROG (tons per year)	NOx (tons per year)	PM_{10} (maximum pounds per day)
2025	0.02	0.01	2.92
YSAQMD Thresholds	**10 tons per year**	**10 tons per year**	**80 pounds per day**
Exceed Thresholds?	No	No	No

Source: Air Quality and Greenhouse Gas Modeling Results (Appendix A)

III. AIR QUALITY Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

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

Finding: Less than Significant

Air districts are required to prepare air quality plans to identify strategies to bring regional emissions into compliance with federal and state air quality standards. Air districts establish emissions thresholds for individual projects to demonstrate the point at which a project would be considered to increase the air quality violations. A project would conflict with the applicable air quality plan if they exceeded any emissions thresholds for which the region is in non-attainment.

As noted previously, the YSAQMD region is designated as non-attainment for the federal and state ozone standards, the state standard for PM_{10}, and the federal standard for $PM_{2.5}$ (YSAQMD 2022a). Accordingly, YSAQMD has prepared air quality plans, including the 2017 Ozone Plan and the Triennial Assessment and Plan Update, to achieve attainment of the applicable ozone and particulate matter standards. The YSAQMD's adopted thresholds of significance indicate the levels of emissions that projects may emit while the region still moves toward attainments of the CAAQS and NAAQS. Projects that exceed thresholds would be considered to conflict with the 2017 Ozone Plan and the Triennial Assessment and Plan Update.

As demonstrated in Table 3.3-2 and Table 3.3-3, the Project would not exceed the thresholds established by the YSAQMD. As a result, the Project would not conflict with or obstruct implementation of the applicable air quality plan, and the impact is less than significant.

b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Finding: Less than Significant

In developing thresholds of significance for air pollutants, the YSAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As presented in Table 3.3-2 and Table 3.3-3, Project emissions from both construction and operations would be below the applicable thresholds of significance. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard, and the impact would be less than significant.

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

Finding: Less than Significant

This discussion addresses whether the Project would expose sensitive receptors to construction-generated fugitive dust (PM_{10}) or diesel particulate matter (DPM).

According to CARB, some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The project area is not located directly adjacent to any sensitive receptors; the closest residence to the project site is located over 1,065 feet away.

Fugitive dust (PM_{10}) would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. However, YSAQMD Rule 2.11, Particulate Matter Concentration, limits the discharge of particulate matter emissions. In addition, as demonstrated in Table 3.3-2, PM_{10} emissions from construction would not exceed the YSAQMD's threshold of significance.

Exposure to DPM from diesel vehicles and off-road construction equipment can result in health risks to nearby sensitive receptors. While the Project would involve the use of diesel fueled vehicles and off-road equipment, construction would be temporary. According to CARB, DPM emissions have also been shown

to be highly dispersive in the atmosphere with the DPM concentration decreasing with distance from the source (CARB 2005). Given the substantial distance between the project site and the nearest receptors, the concentration of DPM at the nearest receptors would be substantially reduced, and construction of the Project would not result in a health risk exposure from DPM.

Based on the above, implementation of the Project would not expose sensitive receptors to substantial pollutant concentrations, and the impact would be less than significant.

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

Finding: Less than Significant

According to the YSAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, auto body shops, composting facilities, food processing facilities, refineries, dairies, and asphalt or rendering plants (YSAQMD 2007). While offensive odors rarely inflict physical harm, the YSAQMD notes that odors can still generate considerable distress among the public because of their unpleasant nature, which in turn, potentially leads to citizen complaints to local governments and the YSAQMD. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

The presence of an odor impact is dependent on a number of variables, including: the nature of the odor source; the frequency of odor generation; the insensitivity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor. Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. project construction would also be required to comply with all applicable YSAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations would help to minimize air pollutant emissions and any associated odors related to operation of construction equipment. Considering the short-term nature of construction activities and the regulated and intermittent nature of the operation of construction equipment, construction of the Project would not be expected to create objectionable odors affecting a substantial number of people.

Wastewater treatment facilities are identified as a known odor-generating use (YSAQMD 2007). However, the Project only includes improvements to the existing WWTF. The Project would not result in any odor-generating activities that are closer to sensitive receptors as compared to what already occurs under existing conditions. Although the Project would result in increased treatment capacity at the WWTF, the Project also includes updates that are anticipated to increase system efficiencies and reduce odors from the WWTF. Finally, the YSAQMD regulates objectionable odors through Rule 2.5 (Nuisance), which prohibits any person or source from emitting air contaminants or other material that result in any of the following: cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; endanger the comfort, repose, health, or safety of any such persons or the public; or have a natural tendency to cause injury or damage to business or property. Rule 2.5 is enforced based on complaints. If complaints are received, the YSAQMD is required to investigate the complaint to determine

and provide a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are made during construction or operation of the Project, the YSAQMD would see that such odors are addressed.

Overall, implementation of the Project would not result in other emissions, such as those leading to odors, adversely affecting a substantial number of people, and the impact would be less than significant.

3.4 Biological Resources

3.4.1 ENVIRONMENTAL SETTING

The project site is located along the phytogeographic interface between the San Francisco Bay Area/Central Coast/Sacramento Valley subregions of the California Floristic Province (Baldwin et al. 2012). In classifying the habitat types found within the Dixon WWTF project area, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). The final classification and characterization of the habitat types of the Dixon WWTF property were based on field observations made during a site visit and biological survey conducted on September 12, 2023.

The upland portions of the property consist of the following habitats: fallow agricultural fields, ruderal (i.e., disturbance associated with ongoing facility maintenance such as mowing, discing, spraying), and ornamental plantings; wetland habitats consist of emergent marsh (found primarily within various unnamed irrigation canals and drainage ditches generally located along the periphery of the facility), and potential seasonal wetlands.

Because the property has a long history of anthropogenic disturbances associated with agricultural development of the area and approximately 50 years of wastewater treatment and land application of effluent (i.e., the greater area was largely a mosaic of seasonal wetlands, including vernal pools and emergent marshlands, prior to Euro-American settlement), the prevalent vegetative cover in the upland portions of the property consists of a mix of upland and non-native annual grasses and broad-leaved plants.

3.4.2 REGULATORY SETTING

3.4.2.1 Federal Regulations

3.4.2.1.1 Section 404 of the Federal Clean Water Act

The United States Army Corps of Engineers (USACE) and the EPA regulate the discharge of dredge or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA) (“waters of the United States” include wetlands and lakes, rivers, streams, and their tributaries). Wetlands are defined for regulatory purposes as areas “…inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated solid conditions” (333 CFR 328.3, 40 CFR 230.3). Project proponents must obtain a permit from the USACE for all discharges of fill material into waters of the United States, including jurisdictional wetlands, before proceeding with a proposed action.

3.4.2.1.2 Section 401 of the Federal Clean Water Act

Compliance with Section 401 of the CWA is required for any project requiring a federal action (i.e., USACE) permit or federal funding) with construction that could have an impact to surface water quality (EPA 2023) if the project would have a point source discharge into waters of the United States. The Regional Water Quality Control Board (RWQCB) is a responsible agency under CEQA and would review the CEQA document.

3.4.2.1.3 Endangered Species Act of 1973

The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under Section 9 of FESA. The act protects listed species from harm or "take" which is broadly defined as "…the action of harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in any such conduct" (USFWS 1973). For any project involving a federal agency in which a listed species could be affected, the federal agency must consult with the USFWS in accordance with Section 7 of FESA. The USFWS issues a biological opinion and, if the project does not jeopardize the continued existence of the listed species, issues an incidental take permit (USFWS 1973).

3.4.2.1.4 Migratory Bird Treaty Act of 1918 and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (MBTA) (16 United States Code Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668) protect certain species of birds from direct "take" (i.e., harm or harassment as described above). The MBTA protects migrant bird species from take through setting hunting limits and seasons and protecting occupied nests and eggs (USFWS 1918). The Bald and Golden Eagle Protection Act prohibits the take or commerce of any part of the bald or golden eagles (USFWS 1940). The USFWS administers both acts and reviews federal agency actions that may affect species protected under each act. Regarding the Project, the USACE must verify compliance with these two federal regulations prior to issuing a permit.

3.4.2.2 State Regulations

3.4.2.2.1 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) has jurisdiction over species listed as threatened or endangered under section 2080 of the CDFW Code. The California Endangered Species Act (CESA) prohibits take of state-listed threatened and endangered species (CDFW 2023a). The state act differs from the federal act in that it does not include habitat destruction in its definition of take. The CDFW defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (CDFW 2023a). The CDFW may authorize take under the CESA through Sections 2081 agreements. If the results of a biological survey indicate that a state-listed species would be affected by the project, the CDFW would issue an agreement under Section 2081 of the CDFW Code and would establish a Memorandum of Understanding for the protection of state-listed species (USFWS 2023).

CDFW maintains lists for threatened, endangered, and candidate species. California candidate species are afforded the same level of protection as listed species. California also designates species of special concern, which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational values. These species do not have the same legal protection as listed species but may be added to official lists in the future (CDFW 2023a).

CESA protects nesting birds and their parts in Codes 3503, 3503.5, and 3800. Sections 3503, 3503.5, and 3800 of the CDFW Code prohibit the take, possession, or destruction of birds, their nests, or eggs (CDFW 2023a). Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (approximately March 1 through August 30). Disturbance that causes nest abandonment, the loss of reproductive effort (i.e., killing or abandonment of eggs or young), or the loss of habitat upon which the birds depend is considered "taking" and is potentially punishable by fines and/or imprisonment (CDFW 2023a). Such taking would also violate federal law protecting migratory birds under the MBTA (USFWS 1918).

CDFW also maintains a list of species designated as fully protected to provide additional protection to species that face possible extinction. Species listed as fully protected "may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research" (CDFW 2023a). This classification began in the 1960s and remains today, although most are protected under the current endangered species laws. Species that are designated as fully protected by CDFW and have been observed or have the potential to occur within the project area include the white-tailed kite (*Elanus leucurus*).

3.4.2.2.2 California Environmental Quality Act Guidelines Section 15380

Section 15380(b) of CEQA states that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specific criteria. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example "candidate species" that has not yet been listed by the USFWS or CDFW. CEQA, therefore, enables an agency to protect a species from significant project impacts until the respective government agencies have an opportunity to list the species as protected, if warranted.

In general, plants designated by the California Native Plant Society (CNPS) as Rank 1A (plants presumed extirpated in California and either rare or extinct elsewhere), Rank 1B (plants rare, threatened, or endangered in California and elsewhere), Rank 2A (plants presumed extirpated in California, but more common elsewhere), and Rank 2B (plants rare, threatened, or endangered in California, but more common elsewhere) are considered to meet CEQA's Section 15380 criteria. Impacts to these species would therefore be considered "significant" requiring mitigation (CNPS 2023a).

3.4.2.2.3 California Fish and Wildlife Code Sections 1600-1616: Streambed Alteration Agreement

CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes under Sections 1600–1616 of the CDFW Code. The Lake and Streambed Alteration Program, Section

1602, states that CDFW has the authority to regulate all work under the jurisdiction of the State of California that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed.

In practice, CDFW marks its jurisdictional limit at the top of the stream or lake bank or the outer edge of the riparian vegetation, where present, and sometimes extends its jurisdiction to the edge of the 100-year floodplain. Because riparian habitats do not always support wetland hydrology or hydric soils, wetland boundaries, as defined by CWA Section 404, sometimes include only portions of the riparian habitat adjacent to a river, stream, or lake. Therefore, jurisdictional boundaries under Section 1600 may encompass a greater area than those regulated under CWA Section 404 (EPA 2023).

CDFW enters into a Lake or Streambed Alteration Agreement (SAA) with an applicant and can impose conditions on the agreement so that no net loss of wetland values or acreage would be incurred. The SAA is not a permit, but a mutual agreement between CDFW and the applicant.

The Project does not entail work within CDFW SAA jurisdiction.

3.4.2.2.4 California Fish and Wildlife Code Sections 3503, 3503.5 and 3800

Sections 3503, 3503.5, and 3800 of the CDFW Code prohibit the take, possession, or destruction of birds, their nests, or eggs (CDFW 2023a). Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (approximately March 1 through August 30). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend is considered "taking" and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds under acts such as the MBTA (CDFW 2023a).

3.4.2.2.5 State Oak Woodland Regulations

State laws that regulate protection of oak woodlands include Professional Forester's Law of 1972 and CEQA according to Public Resources Code Section 21083.4. The California Oak Foundation (COF) defines an "Oak Woodland" as "an area which has canopy cover of 10 percent, which distinguishes them from oak savannas" (COF 2007). An "oak" is defined in Public Resources Code Section 21083.4 as a native tree species in the genus Quercus, which is 5 inches diameter at breast height or greater. The Oak Woodlands Conservation Act (Senate Bill 1334) requires, in the absence of local tree ordinances, compensatory mitigation for loss oak trees with a diameter at breast height less than 5 inches and provides funding for the conservation and protection of oak woodlands in California. Oak woodland habitats are not found within the Dixon WWTF or adjacent to it.

3.4.2.3 Local Regulations

3.4.2.3.1 Solano Multispecies Habitat Conservation Plan

The Bureau of Reclamation, Solano County Water Agency (SCWA), and its eight-member agency contracts, including the City of Vacaville, the City of Fairfield, Suisun City, the City of Vallejo, the Solano Irrigation District, and the Maine Prairie Water District, have agreed to implement conservation measures to provide for the protection of threatened and endangered species and their habitat within the SCWA service area. The SCWA and member agencies developed the Solano Multispecies Habitat Conservation Plan (HCP) for use within the Solano Project's contract service area and other participating areas of the county. The HCP is intended to support the issuance of an incidental take permit under the CESA for activities associated with future water use in these areas. HCP participants also intend to secure incidental take authorizations from CDFW for state-listed species. The City of Dixon is an HCP Voluntary Participant. The Project is located entirely within the WWTF and "take" of protected species would be avoided and thus would not require coverage under the HCP.

3.4.2.3.2 City of Dixon General Plan

The following goals and policies regarding biological resources are set forth in the City of Dixon General Plan under the Natural Environment Element (City of Dixon 2021).

- **Natural Environment Goal–1**: Preserve, protect, and enhance natural resources, habitats, and watersheds in Dixon and the surrounding area, promoting responsible management practices.
- **Natural Environment Policy-1.11** Support regional habitat conservation efforts, including implementation of the Solano Countywide Multispecies Habitat Conservation Plan.
- **Natural Environment Policy-1.12** Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, sensitive habitat, and wetlands are avoided or mitigated to the greatest extent feasible as development takes place.
- **Natural Environment Policy-1.13:** In areas where development (including trails or other improvements) has the potential for adverse effects on special-status species, require project proponents to submit a study conducted by a qualified professional that identifies the presence or absence of special-status species at the proposed development site. If special-status species are determined by the city to be present, require incorporation of appropriate mitigation measures as part of the proposed development prior to final approval.
- **Natural Environment Policy-1.14** Protect the nests of raptors and other birds when in active use, as required by state and federal regulations. In new development, avoid disturbance to and loss of bird nests in active use by scheduling vegetation removal and new construction during the non- nesting season or by conducting a preconstruction survey by a qualified biologist to confirm nests are absent or to define appropriate buffers until any young have successfully fledged the nest.

3.4.3 IMPACT ANALYSIS

3.4.3.1 Methodology

Stantec completed analysis of the special-status plant and wildlife species known to occur within a five-mile radius of the project site. Figure 3-1 shows the Known Occurrences of Special-Status Species known to occur within three miles of the project area (CDFW 2023b).

In addition to the California Natural Diversity Database Rarefind report (CDFW 2023b), the following sources were used to identify potential sensitive biological resources in the project area:

- Biological Resources Evaluation (Stantec 2012) and field survey September 12, 2023
- A Guide to Wildlife Habitats of California (Mayer and Laudenslayer 1988)
- CNPS online Inventory of Rare and Endangered Plants of California within the Dixon and surrounding eight USGS Quads (CNPS 2023b)
- USFWS list of endangered, threatened, and proposed species within the Dixon and surrounding eight USGS Quads (USFWS 2023)

In total, forty-three species were identified within the vicinity of the project area that had some potential to occur within the Dixon WWTF site: adobe lily (*Fritillaria pluriflora*), alkali milk-vetch (*Astragalus tener var. tener*), bald eagle (*Haliaeetus leucocephalus*), bearded popcornflower (*Plagiobothrys hystriculus*), Burke's goldfields (*Lasthenia burkei*), burrowing owl (*Athene cunicularia*), California linderiella (*Linderiella occidentalis*), California Ridgway's rail (*Rallus longirostris obsoletus*), California tiger salamander–central California DPS (*Ambystoma californiense pop. 1*), coast iris (*Iris longipetala*), Colusa grass (*Neostapfia colusana*), congested-headed hayfield tarplant (*Hemizonia congesta ssp. congesta*), conservancy fairy shrimp (*Branchinecta conservation*), Contra costa goldfields (*Lasthenia conjugens*), Delta green ground beetle (*Elaphrus viridis*), Delta smelt (*Hypomesus transpacificus*), Ferris' milk-vetch (*Astragalus tener var. ferrisiae*), giant gartersnake (*Thamnophis gigas*), golden eagle (*Aquila chrysaetos*), grasshopper sparrow (*Ammodramus savannarum*), harlequin lotus (*Hosackia gracilis*), Lobb's aquatic buttercup (*Ranunculus lobbii*), Longfin smelt (*Spirinchus thaleichthys*), marsh microseris (*Microseris paludosa*), midvalley fairy shrimp (*Branchinecta mesovallensis*), Monarch butterfly (overwintering population) (*Danaus plexippus*), Napa false indigo (*Amorpha californica var. napensis*), nodding semaphore grass (*Pleuropogon refractus*), North Coast semaphore grass (*Pleuropogon hooverianus*), pappose tarplant (*Centromadia parryi ssp. parryi*), round-headed beaked-rush (*Rhynchospora globularis*), saline clover (*Trifolium hydrophilum*), San Joaquin valley Orcutt grass (*Orcuttia inaequalis*), Sebastopol meadowfoam (*Limnanthes vinculans*), Solano grass (*Tuctoria mucronate*), Sonoma sunshine (*Blennosperma bakeri*), Swainson's hawk (*Buteo swainsoni*), two-fork clover (*Trifolium amoenum*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), white-tailed kite (*Elanus leucurus*).

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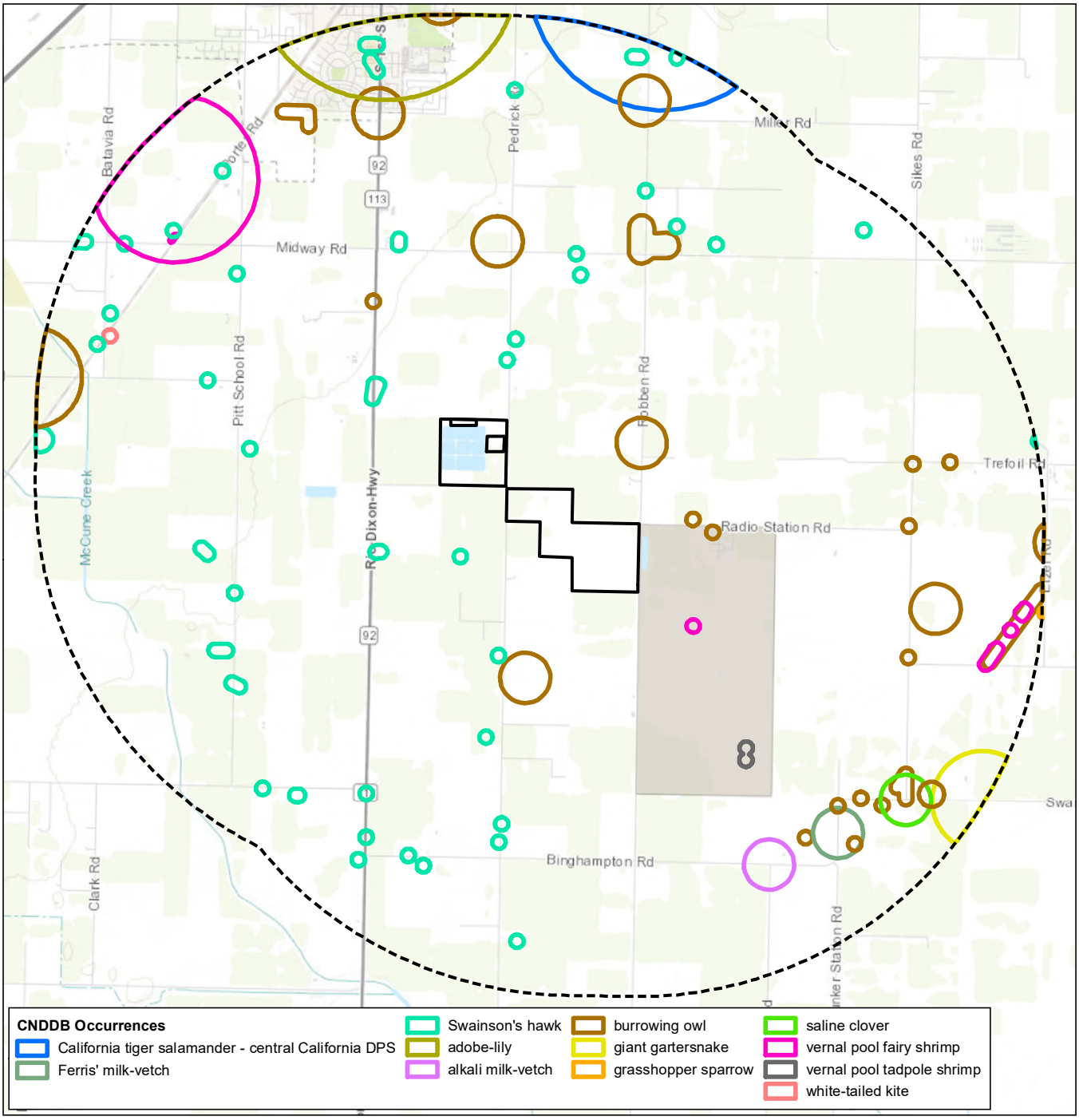

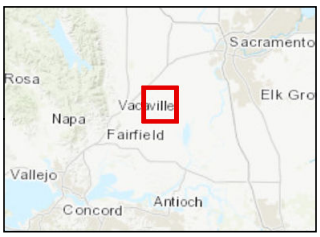

Dixon WWTF

3-Mile WWTF Radius

0 3,000 6,000 Feet

1:72,000 (at original document size of 8.5x11)

N

Stantec

Project Location
Dixon, CA

Prepared by PG on 2023-10-25
Technical Review by KG on 2023-10-25

Client/Project
City of Dixon
Dixon Wastewater Treatment
Facility Expansion Project

Figure No.
3-1

Title
CNDDB Special-status Species Occurrences within 3 Miles

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

These forty-three species were known to occur within three miles of the project site and based on the background information and research for the Project, they were considered to have a low to moderate (or higher) potential to occur in habitats within or directly adjacent to the Dixon WWTF project area. In addition, nesting raptors and migratory birds were documented nesting within the Dixon WWTF site so they are considered within this analysis.

On September 12, 2023, Stantec biologist Jacqueline Phipps conducted a biological/botanical survey of the Dixon WWTF and detention basins parcels, including an approximate 100 ft "buffer area" around the periphery. A thorough survey was completed to identify potential wetlands and/or waters of the U.S., the presence of rare plants, and habitat for special-status species mentioned above, including nesting migratory birds and raptors. Stantec identified a single inactive red-tailed hawk nest in a eucalyptus tree adjacent to the entrance road to the plant (Photos 3.4 and 3.5). In addition, greater yellowlegs shorebirds were documented foraging within one of the collection ponds, and mallard ducks and lesser scaup were foraging within the ponds during the survey conducted in 2023.

3.4.3.2 Biological Communities

3.4.3.2.1 Fallow Agricultural Fields

Based on historic aerial photography and existing conditions observed during the September 2023 field survey, the majority of the property has been left fallow to facilitate wastewater effluent disposal for long periods of time. Due to pilot testing of alternative wastewater disposal practices during the past few years these fields have not been irrigated, allowing secondary succession to occur resulting in the establishment of native and non-native stands of herbaceous plants (Photo 3.6). Due to past disturbances associated with discing and spraying, the majority of plants observed include annuals, biennials, or short-lived perennial plants.

Depending on their position in the landscape, some of the vegetative assemblages contain a greater percentage of hydrophytic (i.e., water-loving) plants, while slightly drier portions favor stands of upland-dominated vegetation. Plants commonly observed throughout these areas included perennial rye grass (*Festuca perennis*), Harding grass (*Phalaris aquatica*), hood canarygrass (*Phalaris paradoxa*), wild oat (*Avena fatua*), field bindweed (*Convolvulus arvensis*), perennial pepperweed (*Lepidium latifolium*), Italian thistle (*Carduus pycnocephalus*), black mustard (*Brassica nigra*), lamb's-quarters (*Chenopodium album*), sour clover (*Melilotus indicus*), spearscale (*Atriplex prostrata*), wild lettuce (*Lactuca* spp.), sow-thistles (*Sonchus* spp.), curly dock (*Rumex crispus*), knotweed (*Polygonum arenastrum*), bristly ox-tongue (*Picris echioides*), common groundsel (*Senecio vulgaris*), and bull mallow (*Malva nicaeensis*).

3.4.3.2.2 Ruderal

These areas occur primarily along access roads, detention basins and berms, and around the maintenance facility where fields and open ground is periodically disced, mowed, and/or sprayed for weed abatement (Photo 3.4 and Photo 3.6). Plant species observed included perennial rye grass, hood canarygrass, curly dock, bristly ox-tongue, sour clover, knotweed, lamb's-quarters, wild lettuce, sow-thistles, black mustard, common groundsel, field bindweed, Mexican sprangle-top (*Leptochloa fusca* ssp. *uninervia*), puncture-vine (*Tribulus terrestris*), tumbleweed (*Amaranthus albus*), Russian thistle (*Salsola*

tragus), cheeseweed (*Malva parviflora*), scarlet pimpernel (*Anagallis arvensis*), asthma weed (*Erigeron onariensis*), cocklebur (*Xanthium strumarium*), velvet-leaf (*Abutilon theophrasti*), and creeping spurge (*Chamaesyce serpens*).

3.4.3.2.3 Ornamental Plantings

Eucalyptus plantings are common throughout the area and were installed to serve primarily as windbreaks for area farms and ranches. Eucalyptus stands on the property are essentially even-aged and are found along the entrance road to the WWTF maintenance facility (Photos 3.4 and Photo 3.7). Due to the allelopathic compounds in the roots, barks, and leaves of this species, the herbaceous understory was either sparsely vegetated, or consisted of sparse stands of perennial rye grass, common grounsel, and cheeseweed. Other tree species observed along the entrance road included plane-tree (*Platanus* sp.), pine (*Pinus* sp.), birch (*Betula* sp.), and oak (*Quercus* sp.).

3.4.3.2.4 Emergent Marsh

Emergent marsh habitats on the property occur primarily along the series of drainage ditches and canals and are characterized by the presence of perennial, robust emergent monocots which grow to an average height of approximately 6 feet. The network of unnamed canals and drainage ditches on and adjacent to the property is hydrologically connected to the Lower Sacramento River, which leads into the Suisun Bay. Emergent marsh on the property is dominated by cattail (*Typha* spp.); vegetation observed along the saturation zone of irrigation ditches and canals included perennial rye grass, hood canarygrass, bristly ox-tongue, blue wild-rye (*Elymus glaucus*), tall flatsedge (*Cyperus eragrostis*), meadow barley (*Hordeum brachyantherum*), annual beardgrass (*Polypogon monspeliensis*), Jersey cudweed (*Pseudognaphalium luteoalbum*), water pepper (*Persicaria hydropiperoides*), and willow-herb (*Epilobium ciliatum*).

3.4.3.2.5 Seasonal Wetlands

Potential seasonal wetland plant communities on the property occur in slightly lower elevation positions in the landscape that pond water during the rainy season for sufficient duration to support vegetation adapted to wetland conditions. Seasonal wetlands in California are highly variable in plant composition, depending on the length of ponding or inundation. They also generally lack the plant community assemblage typical of defined marshes and vernal pools. Dominant plant species observed primarily along existing access roads between fields include congested toad rush (*Juncus bufonius var. congestus*), annual bluegrass (*Poa annua*), annual beardgrass, Boccone's sand-spurrey (*Spergularia bocconi*), and purslane speedwell (*Veronica peregrina ssp. halapensis*). Small potential seasonal wetlands mapped near the existing maintenance facility contained perennial rye grass, hyssop loosestrife (*Lythrum hyssopifolia*), and common purslane (*Portulaca oleracea*).

The majority of new infrastructure would be constructed within this highly disturbed habitat. Eucalyptus trees are seen which can provide nesting habitat for raptors and other migratory nesting birds.

Photo 3.4. Upland/Disturbed Habitat and Trees in Biological Study Area

Photo 3.5. Habitat Within Biological Study Area. Biological Study Area, Holding Ponds.

Photo 3.6. Habitat Within Biological Study Area. Biological Study Area, Fallow Agriculture, Disced.

Photo 3.7. Inactive Raptor Nest. Inactive Red-Tailed Hawk Nest in Eucalyptus Tree.

3.4.3.3 Special-Status Species

For the purpose of this ISMND, special-status species are defined as:

- Species listed or proposed for listing as threatened or endangered under the federal ESA (50 Code of Federal Regulations [CFR] 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register [FR] for proposed species).
- Species that are candidates for possible future listing as threatened or endangered under federal ESA.
- Species listed or proposed for listing by California as threatened or endangered under CESA (14 CCR 670.5) (CDFW 2023a).
- Plant species listed as rare under the California Native Plant Protection Act of 1977 (CDFW Code 1900 et seq.) (CDFW 2023c).
- Plant species that are Rank 1B species and considered to be "rare, threatened, or endangered in California and elsewhere" (CNPS 2023a).
- Species that meet the definitions of "rare" or "endangered" under State CEQA Guidelines Section 15380 (CDFW 2023d) including CNPS list species ranked between 1 and 4 (Table 3.4-1 for details).
- Wildlife species of special concern to CDFW (CDFW 2023d).
- Wildlife species fully protected in California (CDFW Code Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]) (CDFW 2023d).

Conclusions regarding habitat suitability and species occurrence in the project area are based on biological surveys conducted by Stantec biologists and background/desktop research using various resources including those listed above (existing literature and databases).

Based on this research and the biological surveys, the plant and wildlife species with potential to occur in the project area (CNDDB 2023) (Figure 3-1) were each given a "level of potential occurrence within the project site." The level of potential for occurrence within the project site was evaluated as follows:

- **Very Low to Nil:** The project area and/or immediate area do not support suitable habitat for a particular species, and/or the Project is outside the species' known range.
- **Low:** The project area and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside the immediate project area.
- **Moderate:** The project area and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.

- **High:** The project area and/or immediate area provide ideal habitat conditions for a particular species, and/or known populations occur in the immediate area and within the potential area of impact.
- **Present:** An occurrence was recorded within five years or was observed during biological surveys for the Project.

Species with a moderate potential, high potential, or known potential to occur in the project area are further described and are analyzed for potential impacts below Table 3.4-1 in the species accounts. Although they have a low potential to occur or be impacted by the Project, species including the burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Agelaius tricolor*) are also discussed below based on the number and proximity of known occurrences surrounding the project area.

Table 3.4-1. Special-Status Plant and Animal Species and Their Potential to Occur in the Project Area

Common Name	*Scientific Name*	Listing Status			Geographic Distribution	Preferred Habitat	Identification Period	Level of Potential of Occurrence within Project Area
		Federal	State	CNPS				
Plants								
Adobe lily	*Fritillaria pluriflora*	–	S2S3	1B.2	195–2,315 ft (60–705 m)	Chaparral, cismontane woodland, valley and foothill grassland.	February–April	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
Alkali milk-vetch	*Astragalus tener var. tener*	–	S1	1B.2	5–195 ft (1–60 m)	Playas, valley and foothill grassland (adobe clay), vernal pools.	March–June	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
Bearded popcornflower	*Plagiobothrys hystriculus*	–	S2	1B.1	195–2,315 ft (60–705 m)	Valley and foothill grassland (mesic), vernal pools (margins).	April–May	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Burke's goldfields	*Lasthenia burkei*	E	E, S1	1B.1	50–1,970 ft (15–600 m)	Meadows and seeps (mesic), vernal pools.	April–June	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Coast iris	*Iris longipetala*	–	S3	4.2	0–1,970 ft (0–600 m)	Coastal prairie, lower montane coniferous forest, meadows and seeps.	March–June	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Colusa grass	*Neostapfia colusana*	T	E, S1	1B.1	15–655 ft (5–200 m)	Vernal pools (adobe clay).	May–August	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Congested-headed hayfield tarplant	*Hemizonia congesta ssp. congesta*	–	S2	1B.2	65–1,835 ft (20–560 m)	Valley and foothill grassland.	April–November	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Contra costa goldfields	*Lasthenia conjugens*	FE	S1	1B.1	0–1,540 feet (0 – 470 meters)	Cismontane woodland, playas (alkaline), valley and foothill grassland, and vernal pools.	March-June	**Low.** Limited suitable habitat within the edges of the project area. No known occurrences within 3 miles of the project area.
Ferris' milk-vetch	*Astragalus tener var. ferrisiae*	-	S1	1B.1	5 – 245 feet (2-75 meters)	Meadows and seeps (vernally mesic), and valley and foothill grassland (subalkaline flats).	April-May	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
Harlequin lotus	*Hosackia gracilis*	–	S3	4.2	0–2,295 ft (0–700 m)	Broad-leafed upland forest, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, meadows and seeps, north coast coniferous forest, valley and foothill grassland.	March–July	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Lobb's aquatic buttercup	*Ranunculus lobbii*	–	S3	4.2	50–1,540 ft (15–470 m)	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools.	February–May	Very Low to Nil. No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Marsh microseris	*Microseris paludosa*	–	S2	1B.2	15–1,165 ft (5–355 m)	Cismontane woodland, closed-cone coniferous forest, coastal scrub, valley and foothill grassland.	April–July	Very Low to Nil. No suitable habitat within the project area. No known occurrences within 3 miles of the project area.

Common Name	*Scientific Name*	Listing Status			Geographic Distribution	Preferred Habitat	Identification Period	Level of Potential of Occurrence within Project Area
		Federal	State	CNPS				
Napa false indigo	*Amorpha californica* var. *napensis*	–	S2	1B.2	165–6,560 ft (50–2000 m)	Broad-leafed upland forest (openings), chaparral, cismontane woodland.	April–July	Very Low to Nil. No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Nodding semaphore grass	*Pleuropogon refractus*	–	S4	4.2	0–5,250 ft (0–1,600 m)	Lower montane coniferous forest, meadows and seeps, north coast coniferous forest, riparian forest.	February–August	Very Low to Nil. No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
North Coast semaphore grass	*Pleuropogon hooverianus*	–	T, S2	1B.1	35–2,200 ft (10–671 m)	Broad-leafed upland forest, meadows and seeps, north coast coniferous forest.	April–June	Very Low to Nil. No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Pappose tarplant	*Centromadia parryi* ssp. *parryi*	–	S2	1B.2	0–1,380 ft (0–420 m)	Chaparral, coastal prairie, marshes and swamps (coastal salt), meadows and seeps, valley and foothill grassland (vernally mesic).	May–November	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3miles of the project area.
Round-headed beaked-rush	*Rhynchospora globularis*	–	S1	2B.1	150–195 ft (45–60 m)	Marshes and swamps (freshwater).	July–August	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Saline clover	*Trifolium hydrophilum*	–	S2	1B.2	0–985 ft (0–300 m)	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools.	April–June	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
San Joaquin valley Orcutt grass	*Orcuttia inaequalis*	FT	CE, S1	1B.1	35–2,475 feet (10 – 755 meters)	Vernal pools.	April-September	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Sebastopol meadowfoam	*Limnanthes vinculans*	E	CE, S1	1B.1	50–1,000 ft (15–305 m)	Meadows and seeps, valley and foothill grassland, vernal pools.	April–May	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Sebastopol meadowfoam	*Limnanthes vinculans*	E	E, S1	1B.1	50–1,000 ft (15–305 m)	Meadows and seeps, valley and foothill grassland, vernal pools.	April–May	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Solano grass	*Tuctoria mucronata*	E	E, S1	1B.1	15–35 ft (5–10 m)	Valley and foothill grassland (mesic), vernal pools.	April–August	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Sonoma sunshine	*Blennosperma bakeri*	E	E, S1	1B.1	35–360 ft (10–110 m)	Valley and foothill grassland (mesic), vernal pools.	March–May	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Two-fork clover	*Trifolium amoenum*	E	S1	1B.1	15–1,360 ft (5–415 m)	Coastal bluff scrub, valley and foothill grassland (sometimes serpentinite).	April–June	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Invertebrates								
Delta green ground beetle	*Elaphrus viridis*	T	S1	N/A	Jepson Prairie region of Solano County.	Edges of the prairie's large vernal pools (playa pools), formed primarily on clay soil.	Late Winter–Early Summer	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.

Common Name	*Scientific Name*	Listing Status			Geographic Distribution	Preferred Habitat	Identification Period	Level of Potential of Occurrence within Project Area
		Federal	State	CNPS				
California linderiella	*Linderiella occidentalis*	–	S2S3	N/A	California Central Valley.	Documented on most landforms, geologic formations and soil types supporting vernal pools at altitudes as high as 3,800 ft (1,158 m).	Winter–Spring	**Very Low to Nil.** No suitable habitat within the project area. Known occurrences within 3 miles of the project area.
Conservancy fairy shrimp	*Branchinecta conservation*	E	S2	N/A	California Central Valley from Tehama County south to Merced County.	Highly turbid water of vernal pools.	Winter–Spring	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Midvalley fairy shrimp	*Branchinecta mesovallensis*	–	S2S3	N/A	Sacramento Valley from Glenn County to Santa Clara County along the Coast Range, the San Joaquin Valley, and the Sierra foothills from Yuba County to Kern County.	Vernal pools. Can live in relatively warm water temperatures inhabiting some of the smallest and shortest-lived seasonal pools due to its ability to develop rapidly.	Winter–Spring	**Very Low to Nil.** No suitable habitat within the project area. Known occurrences within 3 miles of the project area.
Monarch butterfly (overwintering population)	*Danaus plexippus*	C	S2	N/A	Throughout North America to southern Canada. Most numerous in North America, where they are known to migrate hundreds or even thousands of miles from their breeding grounds across the U.S. and southern Canada to overwintering sites located primarily in Mexico and California.	The U.S. western monarch population breeds west of the Rocky Mountains and overwinters in forested groves along the Pacific Coast from Mendocino, California, south into western Baja, Mexico. Caterpillars feed exclusively on milkweed (*Asclepias* sp.).	Spring–Summer	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	S3	N/A	California Central Valley and foothills, majority below 500 ft (152 m) elevation.	Elderberry shrubs (*Sambucus* sp.), with stems at least about 1 inch in diameter, along rivers and streams.	March–July	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	S3	N/A	Scattered throughout Central Valley, Coast Range, and Southern California.	Vernal pools.	December–May	**Very Low to Nil.** No suitable habitat within the project area. Known occurrences within 3 miles of the project area.
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	S3	N/A	Scattered throughout Central Valley. Shasta through Tulare Counties, and Alameda and Contra Costa Counties.	Ephemeral freshwater habitats. Alkaline pools, clay flats, vernal lakes, vernal pools, vernal swales, seasonal wetlands.	Winter–Spring	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
Fish								
Delta smelt	*Hypomesus transpacificus*	T, X	E, S1	N/A	San Francisco Estuary.	Most spawning happens in tidally influenced backwater sloughs and channel edge-waters.	Year-round	**Very Low to Nil.** No suitable habitat within the project area. Does not occur in the Project's watersheds. No known occurrences within 3 miles of the project area; however critical habitat occurs within 3 miles of the project area.
Longfin smelt	*Spirinchus thaleichthys*	C	T	N/A	San Francisco Estuary and the Sacramento/San Joaquin Delta (Bay-Delta), Humboldt Bay, and the estuaries of the Eel River and Klamath River.	This species is anadromous and migrates from marine habitats including nearshore waters and estuaries to spawn in the lower portions of freshwater streas.	January-March	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.

Common Name	*Scientific Name*	Listing Status			Geographic Distribution	Preferred Habitat	Identification Period	Level of Potential of Occurrence within Project Area
		Federal	State	CNPS				
Amphibians and Reptiles								
California tiger salamander (Central California DPS)	*Ambystoma californiense*	T	T, WL, S3	N/A	Central California to elevations of 1,500 feet (457 meters).	Aquatic habitats include ponds, vernal pools and other ephemeral or permanent water bodies for breeding (holding water for a minimum of 12 weeks for larvae development). Required upland habitat including small animal burrows including those of California ground squirrel (*Spermophilus beecheyi*) and valley pocket gopher (*Thommomys bottae*).	Year-round	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences 3 miles of the project area.
Giant garter snake	*Thamnophis gigas*	T	T, S2	N/A	Found from sea level to 400 ft (122 m) in elevation from Glenn County to the southern edge of San Francisco Bay Delta, and from Merced County to northern Fresno County.	Highly aquatic, found in marshes, sloughs, irrigation ditches, canals, rice fields, slow-moving creeks with nearby vegetation.	Spring−Fall	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
Birds								
Bald eagle	*Haliaeetus leucocephalus*	BGEPA, MBTA	E, FP, S3	N/A	North America including all continuous U.S.	Near lakes, reservoirs, rivers, marshes, and coasts. Typically nest in forested areas adjacent to large bodies of water.	Year−round	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Burrowing owl	*Athene cunicularia*	BCC, MBTA	SSC, S2	N/A	Year-round in southeastern California and the Central Valley. Arid coastal and foothill areas in winter and northeastern California in the summer.	Open, dry annual or perennial grasslands, deserts, and scrublands with by low growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Year-round	**Low.** Limited suitable habitat within the project area. Known occurrences within 3 miles of the project area.
California Ridgway's rail	*Rallus longirostris obsoletus*	FE	E, FP	N/A	San Francisco Estuary.	Tidal and brackish marshes.	February-August	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Grasshopper sparrow	*Ammodramus savannarum*	MBTA	SSC, S3	N/A	Central Valley and coastal California.	Short to middle-height, moderately open grasslands with scattered shrubs.	March−September	**Very Low to Nil.** No suitable habitat within project area. Known occurrences within 3 miles of the project area.
Golden eagle	*Aquila chrysaetos*	BGEPA, MBTA	FP, WL, S3	N/A	North America including all continuous U.S.	Open and semi-open areas primarily in mountains up to 12,000 ft (3,658 m), canyonlands, rimrock terrain, and riverside cliffs and bluffs. Nest on cliffs and steep escarpments in grassland, chaparral, shrubland, forest, and other vegetated areas.	Year-round	**Very Low to Nil.** No suitable habitat within the project area. No known occurrences within 3 miles of the project area.
Swainson's hawk	*Buteo swainsoni*	BCC, MBTA	T, FP, S4	N/A	Migrate from wintering grounds in South America to breeding locations in northwestern Canada, the western United States, and Mexico.	Open habitats, agricultural areas. Often nests near riparian areas.	March−October	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.
White-tailed kite	*Agelaius tricolor*	MBTA	FP, S3S4	N/A	Central and coastal California.	Savannas, open woodlands, marshes, desert grasslands, partially cleared lands, and cultivated fields.	Year-round	**Low.** Limited suitable habitat within the edges of the project area. Known occurrences within 3 miles of the project area.

Common Name	*Scientific Name*	Listing Status			Geographic Distribution	Preferred Habitat	Identification Period	Level of Potential of Occurrence within Project Area
		Federal	State	CNPS				
Nesting raptors and other migratory birds		MBTA	FGC	N/A	Migrants and resident species.	Tree, shrub, ground, and riparian vegetation.	February−August	**Moderate.** Suitable habitats present within and adjacent to the project area.

Federal
− = No listing
BCC = Bird of Conservation Concern
BGEPA = Bald and Golden Eagle Protection Act
C = Candidate for listing under the federal Endangered Species Act
DPS = Distinct Population Segment
E = Endangered under the federal Endangered Species Act
MBTA = Protected under the Migratory Bird Treaty Act
T = Threatened under the federal Endangered Species Act
X = Designated Critical Habitat

State
− = No listing
E = Endangered under the California Endangered Species Act
FGC = California Fish and Game Code
FP = Fully protected
R = Rare under the California Native Plant Protection Act
SSC = Species Of Special Concern
T = Threatened
WL = Watch List

NatureServe State Rank
0.1 = Seriously threatened in California
0.2 = Fairly threatened in California
0.3 = Not very threatened in California
S1 = Critically Imperiled
S2 = Imperiled
S3 = Vulnerable
S4 = Apparently Secure

California Native Plant Society
1A = Plants presumed extirpated in CA and either rare or extinct elsewhere
1B = Plants rare, threatened, or endangered in California and elsewhere
2A = Plants presumed extirpated in CA but more common elsewhere
2B = Plants rare, threatened, or endangered in California but more common elsewhere
3 = Plants about which more information is needed − a review list
4 = Plants of limited distribution − a watch list

Key:
ft = feet
m = meters
N/A = not applicable
U.S. = United States

Resources:
California Herps–A Guide to the Amphibians and Reptiles of California (Nafis 2023)
California Natural Diversity Database Rarefind report.(*CDFW 2023b)*
Inventory of Rare and Endangered Plants for the Allendale, Davis, Dixon, Dozier, Elmira, Liberty Island, Merritt, Saxon, and Winters USGS 7.5-minute Quads(CNPS 2023b)
USFWS List of Endangered, Threatened, and Proposed Species within the Dixon and Surrounding Eight USGS Quads (USFWS 2023).

Based on this analysis, species with a low to high potential for occurrence were included for further review. Descriptions of the five special-status plants and six wildlife special-status species with at least a low potential to occur in the project area are described in detail below. Nesting raptors and migratory birds are also described below given their presence on previous biological surveys conducted at the Dixon WWTF. All other species with a very low to nil potential for occurrence within the Dixon WWTF were not considered any further in this analysis due to a clear lack of suitable habitat within the Dixon WWTF for those species.

3.4.3.3.1 Special-Status Plant Species

Based on the elevation, habitats, soils present on-site, and on a literature review and familiarity with the flora within the Project region, alkali milk-vetch, adobe lily, Contra costa goldfields, Ferris' milk-vetch and saline clover were the only special-status plant species with any potential to occur within the Project (parcels) area based on habitat present (Figure 3-1) (CNDDB 2023).

Alkali milk-vetch: Alkali milk-vetch is found in valley and foothill grasslands and vernal pool habitats at elevations of 1 to 60 m. This is an early blooming species. The blooming period is March to June for the alkali milk-vetch. This plant is designated by CNPS as a list 1B.2 species (rare, threatened or endangered in California and elsewhere and fairly endangered in California). Alkali milk-vetch is threatened by development, competition from non-native plants, and habitat destruction, especially agricultural conversion.

Adobe lily: Adobe lily is found in chaparral, cismontane woodland, and valley and foothill grasslands (CNPS 2023b) at elevations of 60 to 705 m. This is an early blooming species. The blooming period is February to April for the adobe lily. This plant is designated by CNPS as a list 1B.2; 1B species (rare, threatened or endangered in California and elsewhere and fairly endangered in California). Adobe lily is threatened by loss of habitat, grazing, vehicles, development, mining, and horticultural collecting (CNPS 2023b).

Contra Costa goldfields: Contra costa goldfields is found in valley and foothill grassland and vernal pool habitat at elevations of 0-470 meters (CNPS 2001). This species blooms from March-June and is designated by CNPS as a list 1B.1; 1B species (rare, threatened or endangered in California and elsewhere and fairly endangered in California). Contra costa goldfields is threatened by development, habitat alteration, hydrological alterations, overgrazing, and non-native plants (CNPS 2023a).

Ferris' milk-vetch: Ferris' milk-vetch is found in meadows and seeps, and valley and foothill grassland habitat at elevations of 2-75 meters. This species blooms in April-May and is designated by CNPS as a list 1B.1; 1B species (rare, threatened or endangered in California and elsewhere and fairly endangered in California). Ferris' milk-vetch is threatened by agriculture (CNPS 2023a).

Saline clover: Saline clover is found in marshes and swamps, valley and foothill grassland and vernal pools at elevations of 0-300 meters. This species blooms from April-June and is designated by CNPS as a list 1B.2 1B species (rare, threatened or endangered in California and elsewhere and fairly endangered in California). Saline clover is threatened by urbanization and agriculture (CNPS 2023a).

3.4.3.3.2 Special-Status Wildlife Species

Species accounts for special-status wildlife with a low to moderate potential (or higher) to occur in the project area are provided below. A total of six special-status wildlife species known to occur within three miles of the project site have a low to moderate (or higher) potential to occur in habitats within or directly adjacent to the Dixon WWTF project area. In addition, nesting raptors and migratory birds were documented nesting within the Dixon WWTF site so they are considered in this analysis.

California Tiger Salamander: The California tiger salamander is designated as federally threatened by the USFWS. Its habitat includes grasslands with mammal burrows and vernal pools and ponds for breeding. Adult salamanders spend most of their lives underground in mammal burrows. After the first rains of the season, they migrate to the nearest pond or vernal pool to breed and lay eggs. The larval period lasts 3 to 6 months, after which the metamorph salamanders leave the pond in search of mammal burrows. California tiger salamanders have historically been documented 2 miles east of the City of Dixon. They are currently extirpated from this area (CNDDB 2023). There were burrows located along the edges of the project area which may be suitable upland habitat.

Giant garter snake: The giant garter snake is designated as federally threatened by USFWS and designated Threatened by the State of California. Its habitats include highly aquatic, marshes, sloughs, irrigation ditches, canals, rice fields, slow-moving creeks with nearby vegetation. They are found from sea level to 122 meters in elevation and known occurrences are within 3 miles of the project area. During the reconnaissance-level survey, no giant garter snakes were observed on the WWTF parcels. However, the edges of the project area adjacent to holding ponds with water and seasonal wetlands may provide suitable habitat.

Burrowing owl: Burrowing owl habitat includes grasslands, deserts, and scrublands with low growing vegetation. Burrows provide the essential component of burrowing owl habitat. Burrowing owls use burrows made by mammals, but also use human-made structures such as cement culverts, cement, asphalt, or wood debris piles (CDFG 1995). Multiple burrowing owl occurrences have been identified within three miles of the project site (Figure 3-1). During the reconnaissance-level survey, no burrowing owls were observed on the WWTF parcels. However, prior to project construction preconstruction nesting surveys should be completed to identify if active burrows occur within Project boundaries.

Swainson's hawk: Swainson's hawk is a migratory raptor that breeds in California. It typically nests in tall trees near grassland and/or agricultural areas and often prefers nesting near streams. During biological surveys, Swainson's hawks were observed flying over agricultural fields adjacent to the WWTF parcels. The majority of the construction associated with the Project would provide only temporary disruptions to foraging habitat with the installation of below ground infrastructure. However, if there is a permanent loss to foraging habitat, this loss of habitat would need to be mitigated. No nests were located during the reconnaissance-level field survey; however, preconstruction nesting surveys should be conducted in areas with large trees prior to construction. If nests are located, a plan will be developed by a qualified biologist to prevent disturbance during the breeding period between March 1 and September 15. If construction associated with the Project requires conversion of field crops to another use, the loss of foraging habitat should be mitigated according to CDFW guidelines.

However, since the improvements to the Dixon WWTF would not require conversion of field crops to another use, the loss of foraging habitat would not need to be mitigated for according to CDFW guidelines.

White-tailed kite: White-tailed kites (*Elanus leucurus*) are fully protected in California. According to CDFW, "fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take…" (CDFW Code Sections 3511, 4700, 5050 and 5515). White-tailed kites are found in the Central Valley and along the coast, in grasslands, agricultural fields, cismontane woodlands and other open habitats.

White-tailed kite populations may be declining as a result of recent increases in habitat loss and disturbance (Dunk 1995, Erichsen et al. 1994). White-tailed kites are year-round residents of California, establishing breeding territories that encompass open areas with healthy prey populations and nest in snags, shrubs, and trees (Dunk 1995). Small mammal prey comprises 95 percent of the kite diet (Dunk 1995). It forages in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands, ungrazed grasslands, fence rows and irrigation ditches adjacent to grazed lands (Dunk 1995). This species was not documented nesting within or adjacent to the WWTF; however, preconstruction nesting surveys should still be conducted if construction occurs during the nesting season (March 1 to September 1). If nests are found, a no-disturbance buffer would need to be established around the site to avoid disturbance. The extent of the buffer should be determined by a qualified wildlife biologist.

Vernal pool tadpole shrimp. Vernal pool tadpole shrimp are found within ephemeral freshwater habitats, vernal pools, vernal swales, and seasonal wetlands. Vernal pool tadpole shrimp have been documented southwest of the City of Dixon in vernal pool habitat (CNDDB 2023). No vernal pools were observed within the Project boundary (the WWTF parcels) or along the boundaries of the Project.

Migratory Birds and Raptors: Within the project site, an inactive red-tailed hawk nest was identified in a eucalyptus tree along the access road to the Dixon WWTF operations building. The location of the nesting tree was marked via Trimble GPS. In addition, river rock and gravel surround the detention ponds south of the WWTF, and provide nesting habitat for black-necked stilts, American avocets, mallards, and Canada geese. Preconstruction nesting surveys would need to be conducted if construction occurs during the nesting season (March 1 to September 1). If nests are found, a no-disturbance buffer would need to be established around the site to avoid disturbance. The extent of the buffer would be determined by a qualified wildlife biologist.

IV. BIOLOGICAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		

IV. BIOLOGICAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish or U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?			X	

a) Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Finding: Less than Significant with Mitigation

3.4.3.4 Potential Impacts to Botanical Resources

There is a low potential for alkali milk-vetch and adobe lily to occur at the project site. During surveys conducted in 2012 and 2023, neither of the species were observed. The 2012 surveys were conducted during the appropriate bloom period, March to June (alkali milk-vetch) and February to April (adobe lily), however the surveys in 2023 were conducted outside of the bloom period for both of those species.

The habitat in the project area is very limited and likely too disturbed from maintenance activities, development, and human activity to support these two special-status plants. Impacts to these species would be unlikely because much of the Project would be limited to existing disturbed areas (i.e., dirt and gravel roads and cleared areas) and the aforementioned plants do not typically occupy those areas. Mechanisms for potential impacts to these species should they occur in the project area include excavation (i.e., species removal) and access (i.e., species compaction). Therefore, although impacts are unlikely given the limited suitable habitat, the application of mitigation measures BIO-1 and BIO-2 are

necessary to reduce the potential removal of compaction of special-status plant species to less-than-significant levels. These measures include preconstruction awareness training (BIO-1) and preconstruction special-status plant surveys prior to construction and specific performance standards should special-status plants be encountered (BIO-2). The measures are described in detail at the end of this section.

Therefore, with the application of mitigation measures BIO-1 and BIO-2, the Project is considered to have less-than-significant impacts on special-status botanical species.

3.4.3.5 Potential Disturbance Nesting Raptors and Other Migratory or Special-Status Birds and During Construction Activities

The trees, shrubs, and grassland plant species within the project area provide potential nesting habitat for raptors and other migratory birds, including Swainson's hawk, burrowing owl, and the white-tailed kite. The project area is also within close proximately to nesting habitat for migratory waterfowl or waterbirds as well as nesting raptors and foraging habitat for many bird species. Nesting season typically occurs March 1 through August 30, and due to the Project timing of construction, there is a potential to disturb raptor nests and other nesting migratory birds. This disturbance could cause nest abandonment and subsequent loss of eggs or developing young at active nests in or near the project area. Disturbance resulting in nest abandonment or loss of eggs would be considered a potential substantial adverse impact. With the implementation of Mitigation Measure BIO-3 and BIO-4 described below, the impact would be reduced to a less-than-significant level. These measures include preconstruction nesting bird surveys with proper performance standards should nesting raptors and/or migratory birds be encountered, including nesting locations for Swainson's hawk, burrowing owl, and the white-tailed kite.

3.4.3.6 Swainson's Hawk Foraging Habitat

If construction associated with the Project requires conversion of field crops to another use, the loss of foraging habitat for Swainson's hawk should be mitigated according to CDFW guidelines. However, since the improvements to the Dixon WWTF would not require conversion of field crops to another use, the loss of foraging habitat would not need to be mitigated according to CDFW guidelines. The areas adjacent to the Dixon WWTF contain Swainson's hawk foraging habitat, while the ruderal areas within the Dixon WWTF do not. Therefore, there is no impact from the improvements to the Dixon WWTF on Swainson's hawk foraging habitat.

b) Would the Project have a substantial adverse effect on any riparian habitat, sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Finding: Less than Significant with Mitigation

The Project is primarily located in disturbed areas such as existing paved developed areas and within highly disturbed ruderal habitats. In addition, the Project does not cross or impact open country habitats where wetlands, drainages, or other sensitive natural communities exist. The Dixon WWTF does not contain any vernal pool or riparian habitat that would be considered sensitive and habitat for special-

status wildlife species, including California tiger salamander and vernal pool fairy shrimp. Therefore, the proposed improvements to the Dixon WWTF would have no impact on these species or their habitats. However, drainages with wetland vegetation do occur along Casey Road along the northern edge of the existing irrigation area and along the western edge of the treatment area. A drainage/irrigation ditch runs along Pedrick Road outside of the Dixon WWTF. None of these drainages with wetland vegetation would be directly impacted by the proposed improvements at the Dixon WWTF.

Indirect impacts to drainages and wetland habitat from erosion, runoff, or sedimentation are possible if grading and construction activities are located adjacent to such features. If construction does occur within 50 feet of such features, sediment control BMPs such as hay coils and natural buffers (as described in Mitigation Measure GEO-1 in Section 3.7) would be implemented. An assessment of water quality impacts is addressed in the Water Quality and Hydrology (Section 3.10).

The implementation of Mitigation Measure BIO-5 and Mitigation Measure GEO-1 (listed in Section 3.7 below) would minimize the potential impacts of the Project to less-than-significant levels.

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

Finding: Less than Significant with Mitigation

Drainages with wetland vegetation occur along Casey Road, along the northern edge of the existing irrigation area, and along the western edge of the treatment area. A drainage/irrigation ditch also runs along Pedrick Road outside of the Dixon WWTF. A stormwater drainage that runs along the entrance road within the Dixon WWTF is constructed in uplands for the sole purpose of draining stormwater from the site to the drainage/irrigation ditch that runs along Pedrick Road outside of the Dixon WWTF.

Work in any potential waters of the U.S. requires a wetland/waters delineation, a USACE verification of that delineation, and proof of compliance with the CWA Section 404. If the improvements at the Dixon WWTF are to occur within potential waters of the U.S., then a wetlands/waters of the U.S. delineation and a CWA Section 404 permit from the USACE would be required. Based on the Design Report (Stantec 2023), project improvements have been planned to avoid waters of the U.S. Therefore, coordination with the USACE to compensate the loss of wetland/waters of the U.S. would not be needed.

Therefore, with complete avoidance or the implementation of the Mitigation Measure BIO-5, the potential impacts to wetlands and drainages are considered less than significant.

d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Finding: Less than Significant

The project area is currently designated as a WWTF and is largely developed. Although not likely a migration corridor, the area may facilitate the movement of wildlife such as migratory birds. This particular area, including the wastewater treatment ponds and irrigation area may provide water and foraging opportunities and therefore attract waterfowl and other migratory birds. The project construction would not inhibit movement to or access to the areas that may supply foraging opportunities. The remaining areas of the Project, including existing paved roads and buildings would likely deter animals from entering the project site. It is unlikely the project site would prevent wildlife and migratory birds from their usual seasonal or migratory movements. As a result, the Project is expected to have a less-than-significant impact on migratory bird movements and other common wildlife migrations and no mitigation is required.

e/f) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Would the Project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?

Finding: Less than Significant

The Project would not conflict with local ordinances relative to biological resources as specified in the City of Dixon General Plan (City of Dixon 2021), Solano Multispecies HCP or local ordinances. The Project is located in a developed wastewater facility and therefore would not conflict with these plans or local ordinances. The City of Dixon does not have an adopted tree ordinance; however, oak woodlands and/or heritage oaks would not be impacted by the proposed improvements within the Dixon WWTF.

In accordance with the City of Dixon General Plan Natural Environment Element Goals (City of Dixon 2021), the Project is protective of special-status species and their habitats. The City of Dixon is an HCP Voluntary Participant. The HCP is intended to support the issuance of an incidental take permit under the ESA for activities associated with future water use in these areas. HCP participants also intend to secure incidental take authorizations from CDFW for state-listed species. The Project is located entirely within the WWTF and “take” of protected species would be avoided and thus would not require coverage under the HCP. In addition, the improvements to the Dixon WWTF are intended to minimize loss of water resources through minimizing evaporation of water through the wastewater treatment process.

Therefore, for the above-mentioned reasons, the Project would not conflict with any approved or planed local policies or ordinances protecting biological resources. This potential impact is thus considered less than significant and no mitigation is required.

3.4.4 MITIGATION MEASURES

3.4.4.1 Mitigation Measure BIO-1: Environmental Awareness Training

Environmental awareness training will be given to construction personnel by a qualified biologist to brief them on how to recognize special-status species that could occur in the area such as rare plants and active breeding bird nests. Environmental training pamphlets (typically provided by the qualified biologist during the training) will also be available on-site for use by environmentally trained construction personnel in training new personnel to the Project in the absence of the qualified biologist. If special-status species

are encountered in the work area, construction will stop, and the qualified biologist will be notified for guidance before any construction activities are resumed. Depending on the species-listing and persistence in the area, the biological monitor will notify the USFWS and/or CDFW for guidance, if necessary.

3.4.4.2 Mitigation Measure BIO-1 Implementation

- **Responsible Party:** City of Dixon will ensure that a qualified biologist conducts preconstruction environmental awareness training.
- **Timing:** One environmental awareness training will be conducted prior to the initiation of construction.
- **Monitoring and Reporting Program:** The training will be conducted by a qualified biologist and the training brochures will be kept on the construction site.
- **Standards for Success:** Construction personnel will be trained in the key characteristics for identifying and avoiding impacts to special-status species. Special-status species will not be disturbed during the project construction activities.

3.4.4.3 Mitigation Measure BIO-2: Protocol-level Botanical Surveys Prior to Construction

Botanical surveys will be conducted during the early bloom season prior to construction. Note: surveys were conducted in 2023 and no special-status plants were identified. Should a special-status species be encountered during protocol-level botanical surveys City of Dixon will:

1. Route construction activity away from sensitive plants to the degree feasible in keeping with Project objectives.
2. Relocate plants to suitable habitat outside of the project area, whether within applicant-owned land or off-site.
3. Monitor affected populations or relocated populations to document potential Project-related impacts.
4. Restore or enhance occupied habitat on-site or at another location; and/or
5. Protect occupied habitat for the species on-site or at another regional location.

3.4.4.4 Mitigation Measure BIO-2 Implementation

- **Responsible Party:** City of Dixon will ensure that a qualified biologist conducts preconstruction early bloom special-status plant surveys.
- **Timing:** March-June, prior to construction.

- **Monitoring and Reporting Program:** The survey results will be presented in a survey report, and if special-status species were encountered the report will include recommended/required actions for avoidance.
- **Standards for Success:** Avoidance or compensation for special-status plant species impacts.

3.4.4.5 Mitigation Measure BIO-3: Exclusion Fencing Installation for Environmentally Sensitive Areas

Exclusion fencing will be installed adjacent to any water with emergent vegetation within 50 feet of construction areas, burrow complexes, and around trees with nesting birds should they be encountered.

1. Silt fencing will be installed in all areas where construction occurs within 50 feet of any water with emergent vegetation (i.e., irrigation ditches with emergent vegetation).
2. Burrow complexes will be marked for avoidance.
3. During work activities, trash that may attract predators will be properly contained, removed from the worksite, and disposed of regularly. Following construction, trash and construction debris will be removed from work areas.
4. Spoil sites (concrete wash areas) will be located so they do not drain directly into any drainage or irrigation ditch. If a spoil site drains into a water body, catch basins will be constructed to intercept sediment before it reaches the channels. Spoil sites will be graded to reduce the potential for erosion.
5. Staging and storage areas for equipment, materials, fuels, lubricants, and solvents will be located away from any waters of the U.S.

3.4.4.6 Mitigation Measure BIO-3 Implementation

- **Responsible Party:** City of Dixon will ensure that a qualified biologist conducts preconstruction clearance surveys and that an environmentally trained construction personnel inspects the site daily for the presence of protected species.
- **Timing:** One survey will be conducted by a qualified biologist within two weeks of initiating the Project and exclusion fencing and excavated trenches will be inspected daily by the Project foremen.
- **Monitoring and Reporting Program:** The survey will be conducted by a qualified biologist and a brief survey report will be documented and kept on file with City of Dixon.
- **Standards for Success:** Special-status species and wetlands will not be disturbed during the project construction activities.

3.4.4.7 Mitigation Measure BIO-4: Avoid and Minimize Disturbance and Impacts to Nesting Raptors and Other Migratory Birds

City of Dixon will implement one of the following measures, depending on the specific construction timeframe, to avoid disturbing ground nesting special and non-special-status nesting raptors and migratory birds, including Swainson's hawk, burrowing owl, and white-tailed kites.

If construction activities are scheduled to occur during the breeding season for these species (generally) between March 1 and August 30), a qualified biologist will be retained to conduct the following focused nesting survey within the appropriate habitat:

- Nesting surveys will be conducted within the project area and all potential nesting habitat within 250 feet of this area.
- The surveys should be conducted within one week before initiation of construction activities at any time between March 1 and August 30. If no active nests are detected, then no additional mitigation is required.
- If surveys indicate that migratory bird nests are found in any areas that would be directly affected by construction activities, a no-disturbance buffer will be established around the site to avoid disturbance or destruction of the nest site until after the breeding season or after a biologist determines that the young have fledged (usually late June to mid-July). The extent of these buffers will be determined by a biologist and will depend on the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors should be analyzed to make an appropriate decision on buffer distances.

If construction activities begin before the breeding season (i.e., begin between August 30 and February 28) (pre-existing construction), then construction can proceed until it is determined that an active migratory bird nest would be subject to abandonment as a result of construction activities. Pre-existing construction activities are assumed to be "full force," as are site grading and infrastructure development. Activities that technically initiate construction but are minor would not be considered full force. Optimally, all necessary vegetation removal should be conducted before the breeding season (approximately March 1 through August 30) so that nesting birds would not be present in the construction area during construction activities. If any birds nest in the project area under pre-existing construction conditions, then it is assumed that they are habituated (or will habituate) to the construction activities. Under this scenario, the preconstruction survey described previously should still be conducted on or after March 1 to identify any active nests in the vicinity. Active sites should be monitored by a biologist periodically until after the breeding season or after the young have fledged (usually late June through mid-July). If active nests are identified on or immediately adjacent to the project site, then all nonessential construction activities (e.g., equipment storage and meetings) should be avoided in the immediate vicinity of the nest site, but the remainder of construction activities may proceed.

3.4.4.8 Mitigation Measure BIO-4 Implementation:

- **Responsible Party:** City of Dixon will ensure that a qualified biologist conducts preconstruction surveys.
- **Timing:** One nesting survey will be conducted within one week of initiating the Project if the project construction begins between March 1 and August 30.
- **Monitoring and Reporting Program:** The survey will be conducted by a qualified biologist and a brief survey report will be documented and kept on file with City of Dixon.
- **Standards for Success:** Special-status species and migratory bird nests will not be disturbed during the project construction activities.

3.4.4.9 Mitigation Measure BIO-5: Avoidance or Compensation for Direct Impacts to Waters of the U.S.

City of Dixon plans to avoid all waters of the U.S. and other jurisdictional areas through the final design phase of the Project.

If avoidance of the wetlands/waters of the U.S./waters of the state is not practicable for various engineering or other site constraints, City of Dixon will apply for and obtain a CWA Section 404 Nationwide Permit and comply with the current USACE compensation schedule for any loss of waters of the U.S. City of Dixon will work with the USACE to check that the local and federal “no net loss” of wetlands is properly upheld. For all activities that trigger the USACE CWA 404 permit, City of Dixon will also apply for, obtain, and comply with a CWA Section 401 Water Quality Certification from the Regional Water Quality Control Board.

3.4.4.10 Mitigation Measure BIO-5 Implementation

- **Responsible Party:** City of Dixon is responsible for applying for all permits and approvals needed to fill or dredge any wetlands or work in waters of the U.S./waters of the state (if avoidance is not practicable).
- **Timing:** City of Dixon is responsible for applying for all permits and approvals needed to fill or dredge any wetlands or work in waters of the U.S./waters of the state.
- **Monitoring and Reporting Program:** City of Dixon will ensure that environmental permits will be obtained prior to construction and the appropriate fees paid to comply with the regulatory agency compensatory mitigation schedule for temporary and permanent impacts to waters of the U.S. and riparian areas. The City of Dixon Project manager will prepare a brief letter report on compliance with this mitigation measure for City of Dixon files.
- **Standards for Success:** Appropriate state and federal permit compliance and compensation, including no net loss of waters of the U.S. from the proposed City of Dixon Project.

3.4.4.11 Mitigation Measure GEO-1: Sediment and Erosion Control Measures

(MM GEO-1, Section 3.7)

3.5 Cultural Resources

This section was developed by Stantec Consulting pursuant to Section 15064.5 of the CEQA Guidelines. The purpose was to (1) identify and record cultural resources in the project area; (2) make preliminary evaluations of such resources' significance according to the criteria of the California Register of Historical Resources (CRHR); and (3) recommend procedures for avoidance or mitigation of adverse effects to CRHR-eligible resources.

3.5.1 ENVIRONMENTAL SETTING

This environmental setting provides a brief overview of the prehistoric and historic periods in eastern Solano County and the City of Dixon. This information is provided to give context within which to interpret the cultural resources identified in the project area. The following is an excerpt from the Basin Research Associates, Inc., and Uribe & Associates (1996) Archaeological Sensitivity Review: NCS Stockton, San Joaquin County and NRFT Dixon, Solano County for Engineering Field Activity, West Naval Facilities Engineering Command Report, and the City of Dixon General Plan (City of Dixon 2021).

3.5.1.1 Prehistoric Setting

The project site is within west-central California and is part of the Sacramento Valley, an area with a long history of human occupation from 10,000 B.C. to the present. This region includes valley floor and associated wetlands and riverine settings and foothill areas. The ecological zones of the project area provided a favorable environment during the prehistoric period with valley floor, wetlands, and upland resources available to the native population. Few archaeological resources are known in the general project area although numerous sites are present in the Delta to the south and along the Sacramento River to the east. Moratto (1984) and Basgall & Hildebrandt (1989) offer general and regional overviews, reviews, and interpretations of the local archaeological record (Basin Research Associates, Inc. and Uribe & Associates 1996).

3.5.1.2 Ethnography

The Indigenous inhabitants of the region belonged to a group generally referred to as the Patwin ('people'), a term of reference applied by several tribelets. The term Patwin does not denote a politically unified entity, but rather refers to different groups of people who shared similar cultural traits and close linguistic affinities (Johnson 1978:350). Other names employed for the Patwin include Copeh, Southern Wintun, Southerly Wintun, Southeastern Wintu (Johnson 1978:358-359; Kroeber 1925:map; 1932:256).

Patwin territory occupied an area about 90 miles north-south extending about 40 miles east-west from Princeton in the southern Sacramento Valley southward to San Pablo and Suisun Bays. Most of the population resided in large villages along rivers (Johnson 1978:350-351). The nearest Native American settlements in the vicinity of the project area include village of Ululato located on Ulatis Creek to the west

and the village of Liwai near Winters northwest of the project area (Johnson 1978:350, Fig. 1; Bennyhoff 1961).

The South Wintuan or Patwin language belongs to the larger Penutian language family spoken by other California Indian groups known as the Costanoan, Wintun, Maidu, Miwok, and Yokuts (Johnson 1978:350: Shipley 1978:81 82). In turn, Patwin includes a number of different dialects. Patwin political units were composed of autonomous tribelets with a primary and several satellite villages within a defined territory. The cultural attributes of each tribelet differed slightly from one another and dialects could be spoken by several tribelets (Johnson 1978:354). Each village had a chief who was important in economic and ceremonial domains (Johnson 1978:354).

The Patwin Aboriginal subsistence relied on hunting and fishing, and the gathering of vegetal foods, especially acorns. The subsistence cycle was dependent on the specific locations utilized by individual villages (Johnson 1978:355). The Patwin traded a variety of items including food stuffs, woodpecker scalp belts, feathers, abalone shell, shell and magnesite beads, and even cordage with the Central Wintun.

Porno, Wappo, Northwestern and Southern Maidu (Kroeber 1932:273-274; Davis 1961:34-35 for specific items traded to and from various groups). Material culture relied on a variety of lithic (e.g., projectile points, mortars, pestles) and perishable objects for utilitarian, recreational and ceremonial uses (e.g., bows. harpoons, rule balsa boats, basketry, nets, etc.). Cemeteries were usually located at one end of a village and included cremation in some areas (Johnson L 978:3550-357).

This Aboriginal lifeway was disrupted during the Hispanic era and was subjected to intense Euro-American pressures from the late 1840s through the American Period (Johnson 1978:351). The Patwin of the Sacramento Valley, lower Suisun and Napa Valleys were especially affected. The disruption of the Aboriginal lifeway was due to factors such as the introduction of new diseases, a declining birth rate, missionization, military forays in retribution for livestock theft, and settler raids to capture Aboriginal laborers (Johnson 1978:352). The population of the Patwin declined from an estimated precontact total of 3,500/12.500 to 185 in 1905-1906 and 200 in 1923-1924. In 1803-1827, there were apparently 10 Southern Patwin villages occupied by 527 individuals (Johnson 1978:352 after Kroeber 1932; Cook 1955; Merriam 1955, 1970; Kelsey 1971). Smallpox epidemics in 1828 and especially one in 1838 originating at Fort Ross, had a particularly devastating effect on Native Americans and spread rapidly throughout central and Northern California (Heizer 1953:231). By the early 1930s, Kroeber concluded that the southern half of the Patwin was extinct (Kroeber 1932:254).

Mission Dolores (San Francisco de Asís), established 1776 in San Francisco, Mission San Jose, established in 1797 in Fremont, and later Mission Sonoma (San Francisco Solano) established in 1823 were active in recruiting Native Americans, especially among the southern Patwin (Johnson 1978:351; Hart 1978:277). Mission Sonoma would have been the mission with the greatest impact on the Aboriginal Patwin population living in the project area. The Patwin were transformed from hunters and gatherers into agricultural laborers who lived at the missions and worked with former neighboring groups and for individual EuroAmericans. Later, with the secularization of the missions by Mexico in 1834, most of the Aboriginal population gradually moved from the missions to ranchos to work as manual laborers. The almost total destruction of the Native American cultures in this area was completed during the early American Period (Basin Research Associates, Inc. and Uribe & Associates 1996).

3.5.1.3 Historical Setting

In 1840, the Mexican governor of the territory gave four Mexican leagues in an area then known as the Rancho Los Putos (located in the extreme northern portion of what is now Solano County) to William Wolfskill. John Wolfskill was sent to the area to settle the land claim and arrived on the Solano County side of Rio Los Putos with some cattle. By the 1850s, traffic between San Francisco and Sacramento through what is now the Dixon area had increased as a result of the Gold Rush. Elijah S. Silvey first built a house and corral, and later a general store to serve travelers passing through the area. A blacksmith shop was built in what had come to be known as Silveyville, and in 1856 another store was built in the area. By 1865, there were approximately 150 people living in Silveyville. In the late 1860s, the town of Silveyville was moved to a new location around the railroad line approximately three miles away, on a ten-acre site donated by Thomas A. Dickson. The town became known as Dixon, and began to grow, supported by farms in the vicinity (City of Dixon 2021).

The City of Dixon WWTF was originally built in the early 1950s with upgrades made in the 1990s. There have been verbal accounts of the existence of temporary migrant housing where the current WWTF Pond 1 is located. During the field survey for the Project, minimal historic debris such as wood fragments and metal scraps remain as evidence that this pond area was previously occupied by a historic building that would have been migrant housing.

3.5.2 REGULATORY SETTING

3.5.2.1 Federal Regulations

3.5.2.1.1 National Historic Preservation Act

Most regulations at the federal level stem from NEPA and historic preservation legislation such as the National Historic Preservation Act (NHPA) of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations (Section 106) which pertain to all projects (including the Project) that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. Provisions of NHPA establish the NRHP maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

3.5.2.1.2 American Indian Religious Freedom Act and Native American Graves Protection and Repatriation Act

The American Indian Religious Freedom Act recognizes that Native American religious practices, sacred sites, and sacred objects have not been properly protected under other statutes. It establishes as national policy that traditional practices and beliefs, sites (including right of access), and the use of sacred objects will be protected and preserved. Additionally, Native American remains are protected by the Native American Graves Protection and Repatriation Act of 1990.

3.5.2.2 State Regulations

3.5.2.2.1 CEQA, PRC Section 21083.2, and CEQA Guidelines 15064.5

Includes provisions for significance criteria related to archaeological and historical resources. A significant archaeological or historical resource is defined as one that (a) meets the criteria of CRHR, (b) is included in a local register of historical resources, (c) or is determined by the lead agency to be historically significant. A significant impact is characterized as a "substantial adverse change in the significance of a historical resource." PRC Section 5024.1 authorizes the establishment of the CRHR. Any identified cultural resources must therefore be evaluated against the CRHR criteria.

3.5.2.2.2 Public Resources Code Section 5024.1 California Register of Historical Resources

In order to be determined eligible for listing in the CRHR, a property must be significant at the local, state, or national level under one or more of the following four criteria as defined in PRC 5024.1 and CEQA Guideline 15064.5(a).

- It is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States. (2) It is associated with the lives of persons important to the nation or to California's past. (3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values. (4) It has yielded, or may be likely to yield, information important to the prehistory or history of the state and the nation.
- In addition to meeting one or more of the above criteria, a significant property must also retain integrity. Properties eligible for listing in the CRHR must retain enough of their historic character to convey the reason(s) for their significance. Integrity is judged in relation to location, design, setting, materials, workmanship, feeling, and association.

3.5.2.2.3 Public Resources Code Section 21083.2 Treatment of Unique Archaeological Resources

PRC Section 21083.2 governs the treatment of unique archaeological resources, defined as "an archaeological artifact, object, or site about which it can be clearly demonstrated" as meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

- If it can be demonstrated that a project will cause damage to a unique archaeological resource, appropriate mitigation measures shall be required to preserve the resource in place and in an undisturbed state. Mitigation measures may include, but are not limited to, 1) planning construction to avoid the site, 2) deeding conservation easements, or 3) capping the site prior to construction. If a resource is determined to be a "non-unique archaeological resource," no further consideration of the resource by the lead agency is necessary.

3.5.2.2.4 Public Resources Code Section 7050.5 Encountering Human Remains

The possibility of encountering human remains cannot be entirely discounted. Pursuant to PRC Section 7050.5 if human graves are encountered, work should halt in the vicinity and the Solano County Coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification.

3.5.2.3 Local Regulations

3.5.2.3.1 Solano County General Plan

The following policies from the Solano County General Plan are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Policy RS.P-38:** Identify and preserve important prehistoric and historic structures, features, and communities.
- **Policy RS.P-40:** Consult with Native American governments to identify and consider Native American cultural places in land use planning.

3.5.2.3.2 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) contains goals that directly or indirectly pertain to Project cultural resources, including the following:

- **Goal LCC-3:** Protect, preserve, and enhance the significant cultural and historic features of Dixon, recognizing their importance to the community.
- **Policy LCC-3.1:** Foster the preservation, restoration, and compatible reuse of historically significant structures and sites.
- **Policy LCC-3.2:** Maintain opportunities for dialogue with local Native American groups regarding cultural resources in Dixon.
- **Policy LCC-3.3:** Require cultural resource assessments prior to the approval of development proposals on properties located in archaeologically sensitive areas. Assessments shall include a records search of the California Historical Resources Information System database at the

Northwest Information Center and a pedestrian survey of the site to determine the potential for archaeological, paleontological, and historic resources as well as Native American remains.

3.5.3 IMPACT ANALYSIS

The archaeological area of potential effect (APE) for the proposed is two parcels within the current Dixon Wastewater Treatment Facility, totaling 14 acres. A map of the Project records search area is included in Figure 3-2 below.

3.5.3.1 Records Search

As part of the study, a records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System by Stantec staff, on September 5, 2023 (NWIC File No. 23-0180) for the Project APE and a quarter mile around the project area. The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of archaeological and historic records and reports for an 18-county area that includes Solano County and is housed at Sonoma State University.

The records search for this study was performed in order to (1) determine whether known cultural resources had been recorded within or adjacent to the study area; (2) assess the likelihood of unrecorded cultural resources based on archaeological, ethnographic, and historical documents and literature; and (3) to review the distribution of nearby archaeological sites in relation to their environmental setting.

The record search included a review of all cultural resources, reports, and recorded cultural resources within the immediate project area and a quarter mile around the project area. The records were accessed by utilizing the Dixon U.S. Geological Survey 7.5-minute quadrangle map. Other sources reviewed included the OHP Historic Property Data File (2012), Determination of Eligibility (2012), NRHP/CRHR listings (2008 and updates), California Inventory of Historical Resources (California Office of Historic Preservation, 1976), California State Historical Landmarks (1996), Points of historic Interest (1992), Caltrans Bridge Inventory, and Historic Maps.

The records search revealed no previously recorded historic resources within the project area or within a quarter-mile radius of the project area. No reports were identified overlapping with or intersecting the project area, indicating it had never been surveyed. Three reports were listed within 0.25-miles of the project area.

3.5.3.2 Native American Consultation

On August 2, 2023, the NAHC was asked to review the Sacred Lands File for information on Native American cultural resources on the project site. On August 29, 2023, the NAHC responded that a records search of the Sacred Land File had failed to indicate the presence of Native American cultural resources within the project area. The NAHC provided a list of local Native American individuals/organizations to consult with further. The City of Dixon sent out consultation letters on October 30, 2023, to the Tribes identified on the list. Tribal consultations are ongoing, and results would be added to this ISMND once the process is complete. A list of Tribes consulted is included in Appendix C.

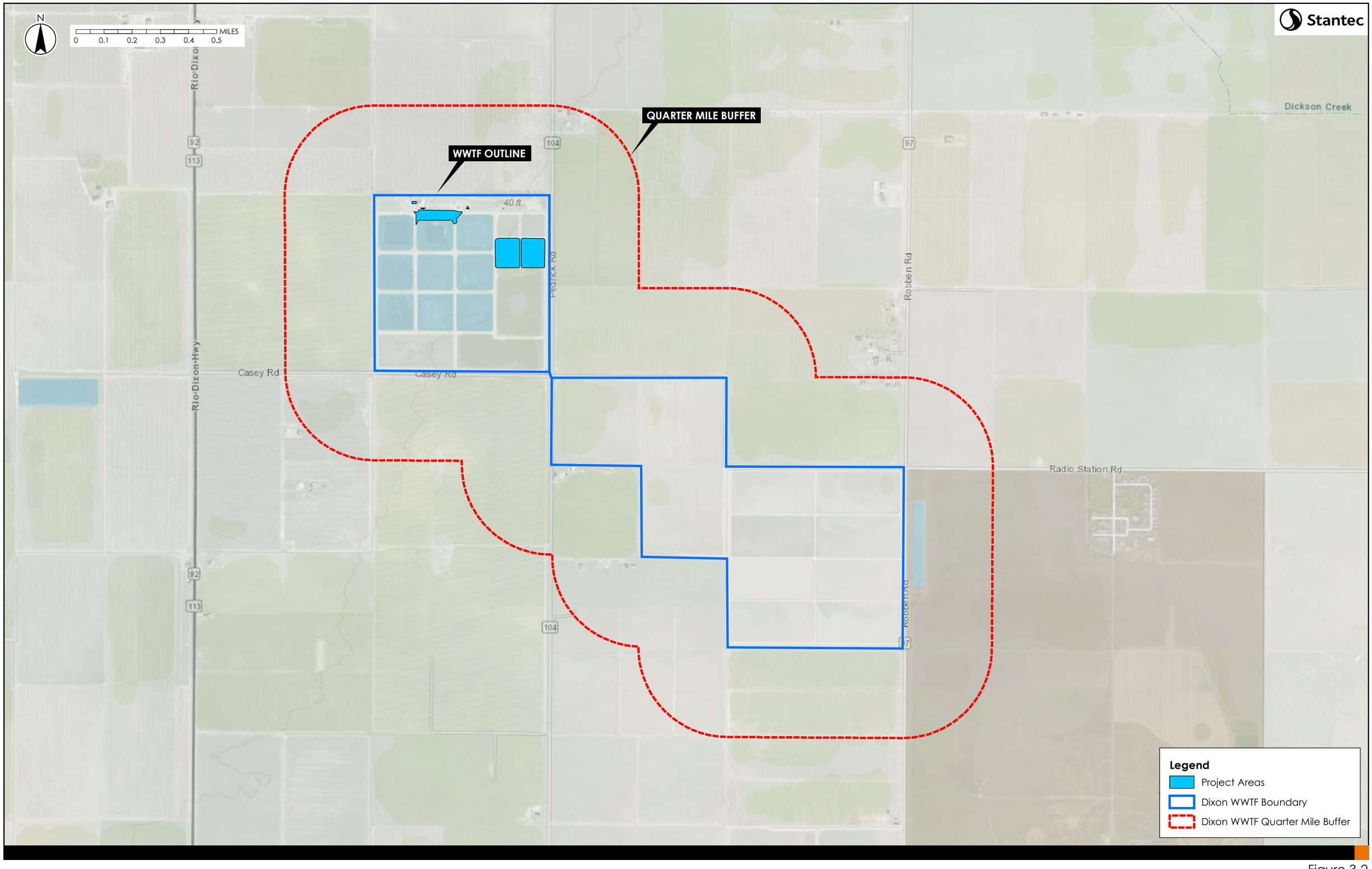

Figure 3-2

Dixon WWTF Expansion Project - Records Search Area

3.5.3.3 Field Survey

A Stantec cultural resource specialist conducted a survey of the entire Project APE on September 30, 2023. The project area was evaluated for the presence of prehistoric or historic site indications. The survey used transects spaced no more than fifteen meters apart and examined the entire APE. Ground visibility was fair to poor and was covered with pavement, dirt, gravel, existing WWTF infrastructure, or vegetation.

3.5.3.4 Results and Findings

A full accounting of all potential cultural resources located within the APE was achieved through a records search, Native American sacred lands search, and archaeological survey. The survey confirmed that the ground surface within the APE has been previously disturbed and developed. We are confident that our identification efforts have adequately explored the project site and its potential for cultural resources. As such, a finding of No Historic Properties Affected is recommended. No further cultural resources study is warranted unless the design of the Project changes.

V. CULTURAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

a) Would the Project cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?

Finding: Less than Significant with Mitigation

There are no known historic resources within the APE. However, the possibility for encountering buried historical resources during project construction can never be fully discounted. Therefore, Mitigation Measure CULTURAL-1 is required to reduce potential impacts on cultural resources to a less-than-significant level.

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource as identified in Section 15064.5?

Finding: Less than Significant with Mitigation

There are no known prehistoric archaeological resources within the Project APE. While no prehistoric archaeological resources have been recorded in the project area, the possibility for encountering buried

archaeological resources can never be fully discounted. Therefore, Mitigation Measure CULTURAL-1 is required to reduce impacts to a less-than-significant level.

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

Finding: Less than Significant with Mitigation

There are no known human burials or remains within the project area and no evidence of human remains was observed during surveys. If human remains are encountered during construction of the Project mitigation measure CULTURAL-2 would be employed. Therefore, Mitigation Measure CULTURAL-2 is required to reduce impacts to a less-than-significant level.

3.5.4 MITIGATION MEASURES

3.5.4.1 Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural and Paleontological Resources

If cultural resources are encountered during project construction, construction will cease immediately in the subject area and a qualified professional archaeologist will be consulted. Prehistoric resources may include chert or obsidian flakes, projectile points, mortars and pestles, dark friable soil containing shell and bone dietary debris, and heat-affected rock. Historic resources may include stone or wood foundations or walls, structures or remains with square nails, and refuse deposits.

If any paleontological resources (i.e., fossils) are found during project construction, construction will cease immediately in the subject area and the city will be immediately notified. A qualified paleontologist will be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resources. The appropriate treatment of inadvertently discovered paleontological resources will be implemented to see that the impacts to these resources are avoided.

3.5.4.2 Mitigation Measure CULTURAL-1 Implementation

- **Responsible Party:** The City of Dixon would ensure the appropriate treatment for any discovery of prehistoric, historic, or paleontological resources during construction.
- **Timing:** During all ground disturbing activities.
- **Monitoring and Reporting Program:** If any find is determined to be significant, representatives of the City of Dixon and a qualified archaeologist or paleontologist (if a paleontological resource is discovered) would meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials and paleontological resources recovered will be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist or paleontologist (if a paleontological resource is discovered) according to current professional standards. A report will be kept on file at the City of Dixon.

- **Standards for Success:** The proper recording, evaluation, and treatment of any newly identified prehistoric, historic, or paleontological resources.

3.5.4.3 Mitigation Measure CULTURAL-2: Proper Handling of Inadvertent Discovery of Human Remains

If human remains are encountered, work will cease in the vicinity and the County Coroner will be notified immediately pursuant to PRC Section 7050.5. At the same time, an archaeologist will be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner must notify the NAHC within 24 hours of this identification. The NAHC will identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant will have an opportunity to make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. (General Plan Policy LCC–3.3 as described in Section 3.15.1.3 above).

3.5.4.4 Mitigation Measure CULTURAL-2: Implementation

- **Responsible Party:** The City of Dixon and the Solano County Coroner would ensure the appropriate treatment for any discovery of any human remains during construction.
- **Timing:** During all ground disturbing activities.
- **Monitoring and Reporting Program:** The recording and evaluation of any newly identified human remains will be conducted by qualified professional archaeologists and a report will be kept on file at the City of Dixon.
- **Standards for Success:** The proper recording, evaluation, and treatment of any newly identified human remains.

3.6 Energy

3.6.1 ENVIRONMENTAL SETTING

Pacific Gas and Electric (PG&E) is the utility company that provides electricity and natural gas supplies to the City of Dixon. In February 2018, PG&E announced that it had reached California's 2020 renewable energy goal 3 years ahead of schedule (PG&E 2018). In 2021, approximately 48 percent of PG&E's electricity came from renewable resources including solar, wind, geothermal, biomass and small hydroelectric sources. Additionally, approximately 91 percent of PG&E's total electric power mix is from GHG-free sources, which includes nuclear and large hydroelectric sources of energy (CEC 2023).

3.6.2 REGULATORY SETTING

The following includes the key federal, state, and local regulations related to energy resources that are applicable to the Project.

3.6.2.1 Federal Regulations

3.6.2.1.1 National Energy Conservation Policy Act

The National Energy Conservation Policy Act (42 USC Section 8201 et seq.) serves as the underlying authority for federal energy management goals and requirements and is the foundation of most federal energy requirements. The National Energy Conservation Policy Act also established fuel economy standards for on-road motor vehicles in the United States. The National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards and for revising existing standards. In March 2022, the NHTSA finalized CAFE standards for model years 2024 to 2026 (NHTSA 2022).

3.6.2.2 State Regulations

3.6.2.2.1 California Energy Code

Compliance with the California Energy Code (CCR Title 24, Part 6, California's Energy Efficiency Standards) and Title 20, Public Utilities and Energy, standards must occur for all new buildings constructed in California. These efficiency standards apply to new construction of both residential and nonresidential buildings, and they regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit processes, and local government agencies may adopt and enforce energy standards for new buildings provided that these standards meet or exceed those provided in the Title 24 guidelines.

3.6.2.2.2 Warren-Alquist Energy Resources Conservation and Development Act

Initially passed in 1974 and amended since, the Warren-Alquist Energy Resources Conservation and Development Act (Warren-Alquist Act) created the California Energy Commission (CEC), California's primary energy and planning agency. The seven responsibilities of the CEC are forecasting future energy needs, promoting energy efficiency and conservation through setting standards, supporting energy-related research, developing renewable energy resources, advancing alternative and renewable transportation fuels and technologies, certifying thermal power plants 50 megawatts or larger, and planning for and directing state response to energy emergencies. Additionally, the Warren-Alquist Act acknowledges the need for renewable energy resources and encourages the CEC to explore renewable energy options that would be in line with environmental and public safety goals (Warren-Alquist Act PRC Section 25000 et seq.).

3.6.2.2.3 California Renewables Portfolio Standard

California's Renewable Portfolio Standard (RPS) was initially established in 2002 by SB 1078, with the initial requirement that 20 percent of electricity retail sales be served by renewable resources by 2017. The program was accelerated in 2006 under SB 107, which required that the 20 percent mandate be met by 2010. In April 2011, SB 2 was signed into law, requiring electricity retailers in the state to procure 33 percent of their energy sources from renewable energy sources by the end of 2020 (CPUC 2021). In

addition, SB 350, passed in 2015, directs California utilities to further increase the amount of renewable energy delivered to customers to 50 percent by 2030.

The California Public Utilities Commission implements and administers RPS compliance rules for California's retail sellers of electricity, which include large and small investor-owned utilities, publicly owned utilities, electric service providers, and community choice aggregators. The CEC is responsible for the certification of electrical generation facilities as eligible renewable energy resources and adopting regulations for the enforcement of RPS procurement requirements of public owned utilities.

3.6.2.3 Local Regulations

3.6.2.3.1 Solano County General Plan

The following goals and policy from the Solano County General Plan are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal RS.G-5:** Ensure availability of affordable energy supplies and require efficiency and conservation measures to minimize energy consumption.
- **Policy RS.P-49:** Ensure energy conservation and reduced energy demand in the county through required use of energy-efficient technology and practices.
- **Policy RS.P-53:** Enable renewable energy sources to be produced from resources available in Solano County, such as solar, water, wind, and biofuels to reduce the reliance on energy resources from outside the county.
- **Policy RS.P-57:** Encourage the use of technology or siting to minimize adverse impacts from energy production facilities on the environment, including wildlife and agricultural resources.
- **Policy RS.P-59**: Encourage on-site renewable energy production and use and energy conservation measures.

3.6.2.3.2 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) includes the following goals, policies, and action items related to energy that may be applicable to the Project:

- **Goal NE-2**: Use energy and water wisely and promote reduced consumption.
- **Policy NE-2.1**: Promote energy conservation throughout the community and encourage the use of renewable energy systems to supplement or replace traditional building energy systems.
- **Policy NE-2.2**: Implement energy and water conservation measures in city facilities and operations.
- **Policy NE-2.5:** Encourage new development to optimize water efficiency measures and conservation practices in their design and construction.

- **Policy NE-4.21**: Encourage new developments and existing property owners to incorporate sustainable, energy-efficient, and environmentally regenerative features into their facilities, landscapes, and structures to reduce energy demands and improve on-site resilience to heat.

3.6.3 IMPACT ANALYSIS

Project energy demand during construction and operations was determined based on the modeling that was conducted for the Project using CalEEMod (Appendix A) and using vehicle and equipment emission factors from the CARB's EMFAC2021 (v1.0.2) and EMFAC OFFROAD2021 (v1.0.5). The energy calculations are included as Appendix B.

VI. ENERGY Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

a) Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Finding: Less than Significant

The energy demand associated with implementation of the Project is discussed below.

3.6.3.1 Construction

During construction of the Project, energy resources would be consumed in the form of diesel and gasoline fuel from the use of off-road equipment (i.e., tractors, excavators, trenchers) and on-road vehicles (i.e., construction employee commutes, haul trucks). Construction is not anticipated to require electricity or natural gas.

Off-road construction activities associated with the Project are estimated to consume approximately 32,654 gallons of diesel fuel. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the state; and the Project's fuel consumption is not anticipated to be unnecessary or wasteful.

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the project site during construction. Total on-road fuel usage for construction of the Project would be 21,704 gallons. All vehicles would comply with applicable federal and state regulations governing fuel efficiency.

3.6.3.2 Operations

The Project involves improvements to the existing on-site WWTF. Thus, this analysis only considers the increase in energy demand associated with new operations on the project site. The Project includes new pieces of electrical equipment (i.e., influent pumps, blowers, RAS pump, etc.), and may require additional staff to maintain the expanded operations. Energy demand associated with on-site equipment and employee commutes are discussed below.

Based on the equipment horsepower and estimated hours of use, the new equipment on the project site would consume approximately 1,128,191 kWh of electricity per year. Assuming that new staff members would be required to maintain the new equipment, new employee commutes were estimated to consume approximately 1,083 gallons of vehicle fuel per year.

3.6.3.3 Conclusion

Based on the analysis above, the Project would not result in a potential significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources; therefore, the impact would be less than significant.

b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Finding: Less than Significant

The Project would comply with federal, state, and local regulations aimed at reducing energy consumption. Local regulations have been developed in accordance with federal and state energy regulations, such as the California Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6), the CalGreen Code (California Code of Regulations Title 24, Part 11), and SB 743, which are also aimed at reducing energy consumption. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, the impact would be less than significant.

3.7 Geology and Soils

3.7.1 ENVIRONMENTAL SETTING

According to the City of Dixon General Plan Natural Environment Element, Seismic Hazards, “Like much of California, Dixon is located in a seismically active region. While there are no known active faults within Dixon, there are faults nearby that could subject the community to ground shaking and seismic hazards, which has periodically occurred in the past. In April 1892, a Magnitude 6.0 earthquake struck to the northwest of the city, followed by a Magnitude 5.6 quake to the southeast several days later.” (City of Dixon 2021).

3.7.2 REGULATORY SETTING

3.7.2.1 Federal Regulations

3.7.2.1.1 Clean Water Act (CWA)

The CWA (33 USC 1344) focuses primarily on waters of the United States and is more thoroughly described in Section 2.4 (Biological Resources). However, the CWA focuses on sediment control in two aspects. First, the USACE administers Section 404 which regulates the discharge of fill into waters of the United States. Second, the CWA applies to stormwater discharges, where erosion control is an integral *part of achieving permit compliance.*

3.7.2.1.2 Earthquake Hazards Reduction Act of 1977

The Earthquake Hazards Reduction Act of 1977 established the National Earthquake Hazards Reduction Program (NEHRP) “to reduce the risks of life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program.” The four principal goals of the NEHRP are:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation. Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Many of the tools used to assess and mitigate earthquake hazards and impacts were developed under the NEHRP.

3.7.2.2 State Regulations

3.7.2.2.1 Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act requires the mapping of zones around active faults in California, in an effort to prohibit the construction of structures for human occupancy on active faults and minimize damage due to rupture of a fault. Active faults are those that have ruptured within the past 11,000 years. Where the act identifies an Earthquake Fault Zone, a geologic investigation and report is necessary to prevent siting of buildings on active fault traces.

3.7.2.2.2 Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act is intended to delineate zones where earthquakes could cause hazardous ground shaking and ground failure, including liquefaction and landslides. Currently, zones near the San Andreas Fault in the urban centers of the Greater San Francisco Bay Area and Los Angeles have

been delineated. Local cities and counties within these zones regulate construction in order to minimize loss associated with these seismic hazards.

3.7.2.2.3 California Standard Building Code

Title 24 of the California Code of Regulations, the California Standard Building Code, contains specific requirements for construction with respect to earthquakes and seismic hazards intended to be protective of public health. Construction for this Project would adhere to the California Standard Building Code.

3.7.2.2.4 General Construction Stormwater Discharge Permit

A Statewide General Construction Stormwater Discharge (GCSD) Permit (Order WQ 2022-0057-DWQ) was adopted by the SWRCB on September 8, 2022, and became effective on September 1, 2023, for construction projects that disturb greater than one acre or have the potential to impair water quality. The permit is required regardless of the time of year construction occurs. This permit requires a Notice of Intent to be submitted, a Stormwater Pollution Prevention Plan (SWPPP) to be developed and implemented and monitoring to be conducted. The SWPPP must contain best management practices (BMPs), other measures to prevent pollution and a construction timeline. The SWPPP would demonstrate compliance with erosion and sediment control standards and identify responsible parties. Furthermore, a BMP maintenance program is required by the SWPPP, which should include proper installation and thorough and frequent inspection to ensure the effectiveness of specific BMPs. The Project would require coverage under this permit.

3.7.2.3 Local Regulations

3.7.2.3.1 Solano County General Plan

The following goal and policies from the Solano County General Plan are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal HS.G-1:** Minimize the potential for loss of life and property resulting from natural or human-caused hazards.
- **Policy HS.P-13**: Review and limit the location and intensity of development and placement of infrastructure in identified earthquake fault zones.
- **Policy HS.P-14:** Identify and minimize potential hazards to life and property caused by fault displacement and its impact on facilities that attract large numbers of people, are open to the general public, or provide essential community services and that are located within identified earthquake fault zones.
- **Policy HS.P-15:** Reduce risk of failure and reduce potential effects of failure during seismic events through standards for the construction and placement of utilities, pipelines, or other public facilities located on or crossing active fault zones.

- **Policy HS.P-17**: Restrict the crossing of ground failure areas by new public and private transmission facilities, including power and water distribution lines, sewer lines, and gas and oil transmission lines.
- **Policy HS.P-18:** Make information about soils with a high shrink-swell potential readily available. Require proper foundation designs in these areas.
- **Policy HS.P-19**: Minimize development in areas with high landslide susceptibility.

3.7.2.3.2 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) contains goals and policies that directly or indirectly pertain to soil and geologic hazards, including the following:

- **Goal NE-4:** Protect life and property from natural and human-made hazards and provide quick, effective response to disasters and emergencies.
- **Policy NE-4.1** Protect life, the natural environment, and property from natural and human-caused hazards due to seismic activity, hazardous material exposure, flooding, wildfire, or extreme heat events.
- **Policy NE-4.2** Ensure that structures intended for human occupancy are designed and constructed to retain their structural integrity when subjected to seismic activity, in accordance with the California Building Code.
- **Policy NE-4.3** In areas of high liquefaction risk, require that project proponents submit geotechnical investigation reports and demonstration that project conforms to all recommended mitigation measures prior to city approval.

3.7.3 IMPACT ANALYSIS

VII. GEOLOGY AND SOILS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	

VII. GEOLOGY AND SOILS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?			X	
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

a) Would the Project directly or indirectly cause 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.

Finding: Less than Significant

According to the City of Dixon General Plan and the Solano County General Plan, Figure HS-3, Seismic Shaking Potential is low and the seismicity of the area appears to be minimal, and is not likely to produce ground shaking of over 0.5 g. The Project is located on/and near the Great Valley Fault, which is an inactive fault (City of Dixon 2021; Solano County 2008). The project area is not located in an active fault zone delineated on the California Geological Survey, Alquist-Priolo Earthquake Fault Zoning Map (CGS 2010). The nearest active fault is approximately 18 miles from the project site. The City of Dixon has adopted the 2022 California Building Code (CBC California Code of Regulations Title 24) to provide minimum requirements and standards for the protection of the public safety, health, property, and welfare within their respective jurisdictions. The California Building Code specifies design requirements and standards to account for geologic hazards including seismicity. The WWTF infrastructure would be designed in accordance with the California Building Code specifications and standards. Therefore, impacts are considered less than significant.

ii) Strong seismic ground shaking.

Finding: Less than Significant

According to the City of Dixon General Plan and the Solano County General Plan, Seismic Shaking Potential is low and the seismicity of the area appears to be minimal, and is not likely to produce ground shaking of over 0.5 g. The Project is located on/and near the Great Valley Fault, which is an inactive fault (City of Dixon 2021; Solano County 2008). The project area is not located in an active fault zone delineated on the California Geological Survey, Alquist-Priolo Earthquake Fault Zoning Map (CGS 2010). The nearest active fault is approximately 18 miles from the project site. The City of Dixon has adopted the 2022 California Building Code (CBC California Code of Regulations Title 24) to provide minimum requirements and standards for the protection of the public safety, health, property, and welfare within their respective jurisdictions. The California Building Code specifies design requirements and standards to account for geologic hazards including seismicity. The WWTF infrastructure would be designed in accordance with the California Building Code specifications and standards. Therefore, impacts are considered less than significant.

iii) Seismic-related ground failure, including liquefaction.

Finding: Less than Significant

The project site has a high liquefaction potential and high shrink-swell potential. However, seismic shaking potential is low and the seismicity of the area is minimal, and is not likely to produce ground shaking of over 0.5 g (City of Dixon 2021; Solano County 2008). The California Building Code specifies design requirements and standards to account for geologic hazards including seismicity. The WWTF infrastructure would be designed in accordance with the California Building Code specifications and standards. Therefore, there is no potential for landslides in the project vicinity due to the site's generally flat topography and potential impacts are considered less than significant.

iv) Landslides

Finding: Less than Significant

The project area is generally flat with less than 4 percent slopes (Solano County 2008). According to the Solano County General Plan Figure HS-5 Landslide Stability, the project area is not susceptible to landslides and not likely susceptible to landslides (Solano County 2008). Additionally, according to the California Geologic Survey, the project area is not located in an area that is prone to landslides (CGS 2007). Therefore, impacts are considered less than significant.

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

Finding: Less than Significant With Mitigation

While the Project is not expected to result in substantial soil erosion or loss of topsoil, the Project would impact an area greater than 1 acre and requires a mitigation measure to control erosion. In accordance with the requirements stipulated in the Statewide GCSD permit Mitigation Measure GEO-1 would be

incorporated. As part of Mitigation Measure GEO-1, the City of Dixon would require that the selected contractor prepare an erosion control plan and a SWPPP prior to construction. The plans should provide, whenever practicable, BMPs including measures to trap sediment and prevent soil erosion or transport to nearby surface water courses or storm drains. These plans would be implemented and inspected accordingly throughout the construction process. Additionally, these plans would include measures for restoring and stabilizing the project area after final construction to minimize and control erosion from the completed Project. The implementation of the erosion control plan along with the construction period SWPPP should minimize any substantial soil erosion or loss of topsoil, reducing impacts to less-than-significant levels with Mitigation Measure GEO-1 incorporated.

c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Finding: Less than Significant

The project area is generally flat with less than 4 percent slopes and is not likely susceptible to landslides (Solano County 2008). The project area has a high liquefaction potential and high shrink-swell potential (Solano County 2008). The Project involves improvements to the existing City of Dixon WWTF and the Project itself would not result in unstable soils or on- or off-site landslides. To address any structural issues relating to lateral spreading, subsidence, liquefaction, or collapse, the City of Dixon has adopted the California Building Code (CBC California Code of Regulations Title 24) to provide minimum requirements and standards for the protection of the public safety, health, property, and welfare within their respective jurisdictions. The California Building Code specifies design requirements and standards to account for geologic hazards such as lateral spreading, subsidence, liquefaction, and collapse. The WWTF infrastructure would be designed in accordance with the California Building Code specifications and standards. Therefore, potential impacts are considered less than significant.

d) Would the Project be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?

Finding: Less than Significant

The project area has a high liquefaction potential and high shrink-swell potential (Solano County 2008). The Project involves improvements to the existing City of Dixon WWTF and would not create substantial risks to life or property. The City of Dixon would adhere to the California Building Code (CBC California Code of Regulations Title 24) to provide minimum requirements and standards for the protection of the public safety, health, property, and welfare within their respective jurisdictions. The California Building Code specifies design requirements and standards to account for geologic hazards such as lateral spreading, subsidence, liquefaction, and collapse. The WWTF infrastructure would be designed in accordance with the California Building Code specifications and standards. Therefore, potential impacts are considered less than significant.

e) Would the Project 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?

Finding: No Impact

The Project involves improvements to the existing City of Dixon WWTF. Therefore, the Project would not involve the use of septic tanks or alternative wastewater disposal systems and no impacts would occur.

f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: Less than Significant With Mitigation

There are no unique geologic features along the Project alignment. In addition, significant unique paleontological resources or sites are not likely or expected to occur within the project area. With implementation of MM CUTURAL-1, any potential Project impacts to paleontological resources would be reduced to a less-than-significant level.

3.7.4 MITIGATION MEASURES

3.7.4.1 Mitigation Measure GEO-1: Sedimentation and Erosion Control Measures

Prior to any grading or project construction an erosion control plan and SWPPP will be prepared by a qualified professional to see that erosion and sedimentation from the Project is kept to a minimum. As well, for all activities disturbing greater than one acre, a Statewide General Construction Stormwater Discharge Permit (RWQCB 2009) will be obtained. SWPPP and standard erosion and sediment control BMPs will be used during and after any grading or construction to control accelerated soil erosion and sedimentation and to see that there will be no adverse effect on any nearby streams and drainages. All measures will be implemented in accordance with the approved SWPPP and Stormwater Discharge Permit.

Straw bales, silt fence, coir rolls, and other erosion protection devices will be used in areas of bare soil, and in drainages near all areas of disturbance to reduce surface runoff velocities and to prevent sediment from entering drainages. Maintenance of erosion and sediment control measures during the construction phase will be conducted on a weekly basis. The revegetation of all graded and disturbed areas of bare soil, will be completed within three months of Project completion, or prior to the rainy season.

3.7.4.2 Mitigation Measure GEO-1 Implementation

- **Responsible Party:** The City of Dixon will require the contractor to develop and implement the SWPPP and revegetate the site.
- **Timing:** During and immediately after construction activities.

- **Monitoring and Reporting Program:** The recording and evaluation of the SWPPP and erosion control practices will be conducted by the City of Dixon and the contractor and kept on file at the City of Dixon.
- **Standards for Success:** Minimize on- and off-site erosion and prevent introduction of significant amounts of sediment into any stream or drainage.

3.8 Greenhouse Gas Emissions

3.8.1 ENVIRONMENTAL SETTING

Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. Worldwide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

3.8.2 REGULATORY SETTING

3.8.2.1 Federal Regulations

3.8.2.1.1 U.S. Environmental Protection Agency

On April 2, 2007, in Massachusetts v. EPA, 549 U.S. 497 (2007), the Supreme Court found that GHGs are considered air pollutants covered by the FCAA. The Court held that the USEPA must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. The EPA found that six GHGs taken in combination endanger both the public

health and the public welfare of current and future generations. The EPA also found that the combined emissions of these GHGs from new motor vehicle engines contribute to the greenhouse effect as air pollution that endangers public health and welfare under FCAA Section 202(a).

3.8.2.2 State Regulations

3.8.2.2.1 Assembly Bill 32 and Senate Bill 32

AB 32 required that GHGs emitted in California be reduced to 1990 levels by the year 2020. GHGs, as defined under AB 32, include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. To set a framework for the state to meet this target, CARB was tasked with creating a Scoping Plan (described further below). California announced in July 2018 that the state achieved the AB 32 goal (CARB 2018).

SB 32 was signed into law on September 8, 2016. SB 32 states that, “In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions authorized by this division, the state [air resources] board shall ensure that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit no later than December 31, 2030.”

3.8.2.2.2 Assembly Bill 1279: The California Climate Crisis

AB 1279 was signed into law in 2022 and establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045 and maintain net negative GHG emissions thereafter. AB 1279 provides that the statewide anthropogenic GHG emissions are reduced by at least 85 percent below 1990 levels by the year 2045. The bill would require CARB to ensure that an updated Scoping Plan (CARB 2022) identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable carbon dioxide removal and carbon capture, utilization, and storage technologies to complement AB 1279’s emissions reduction requirements.

3.8.2.2.3 2022 Climate Change Scoping Plan

The 2022 Scoping Plan was approved in December 2022 and assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045, consistent with AB 1279. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state’s long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities (CARB 2022).

3.8.2.3 Local Regulations

3.8.2.3.1 Yolo-Solano Air Quality Management District

The YSAQMD notes that GHG impacts are cumulative in nature, and lead agencies should evaluate whether a project’s incremental direct and indirect GHG emissions are cumulatively considerable (YSAQMD 2022c). The YSAQMD does not have adopted regulations specifically for the purpose of

reducing GHG emissions, although several existing regulations related to air quality have co-benefits that would affect GHG emissions.

3.8.2.3.2 Solano County General Plan

The following goals and policy from the Solano County General Plan are referenced as a to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal HS.G-5:** Recognize the multiple functions of the natural environment for safety, recreation, protection from climate changes, and economic uses.
- **Goal HS.G-6:** Increase awareness of the effect humans have on the environment and encourage individuals and organizations to modify habits and operations that cause degradation to the environment and contribute to climate change.
- **Goal HS.G-7:** Prepare for and adapt to the effects of climate change.
- **Policy HS.P-53:** Evaluate the potential effects of climate change on Solano County's human and natural systems and prepare strategies that allow the county to appropriately respond and adapt.

It is noted that Solano County adopted a Climate Action Plan (CAP) in 2011; however, the measures included in the Solano County CAP do not apply to incorporated land within the City of Dixon, including the project site.

3.8.2.3.3 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) does not include any goals or policies that specifically relate to GHG emissions. Refer to Section 3.3, Air Quality, and Section 3.6, Energy, for applicable goals and policies that result in indirect benefits to GHG impacts. The City of Dixon has committed to preparing a CAP within 36 months of adopting the 2023 General Plan Update; however, the CAP is not yet available for use in this analysis.

3.8.3 IMPACT ANALYSIS

3.8.3.1 Methodology

The YSAQMD has not established a threshold of significance for GHGs. If the lead agency has adopted a CAP or General Plan goals and policies that relate to the reduction of GHG emissions, then the environmental review consider consistency with such documents. If the lead agency has not adopted a CAP or General Plan goals and policies related to GHGs, then YSAQMD recommends that lead agencies consider a project's total emissions in relation to the AB 32 and AB 32 Scoping Plan goals, or the thresholds of significance established by other jurisdictions (YSAQMD 2022).

For this analysis, Project GHG emissions were estimated using CalEEMod Version 2022.1.1.20 under the same assumptions as were presented in Section 3.3, Air Quality, and compared to the former quantitative threshold of significance adopted by the nearby Bay Area Air Quality Management District (BAAQMD

2017).[1] In addition, the Project is qualitatively evaluated for consistency with the CARB's 2022 Scoping Plan.

3.8.3.1.1 Results

Total Project GHG emissions are shown in Table 3.3-4. Construction GHG emissions would be temporary and would cease at the end of the construction period; thus, by including total construction emissions in the table below, this analysis is considered conservative. As presented in the table, Project emissions are well below the applicable threshold of 1,100 $MTCO_2e$/yr.

Table 3.3-4. Project Greenhouse Gas Emissions

Source	Emissions ($MTCO_2e$ per year)
Total Construction Emissions	492.99
Mobile	9.02
Area	0.06
Energy	110.25
Water	1.45
Waste	1.12
Total	**614.88**
Applicable Threshold	**1,100.00**
Exceed Thresholds?	No

Source: Air Quality and Greenhouse Gas Modeling Results (Appendix A)

VIII. GREENHOUSE GAS EMISSIONS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

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

[1] It is noted that the Bay Area Air Quality Management District adopted more recent GHG thresholds of significance in April 2023. However, the more recent thresholds are qualitative Project design features, and are not applicable to the Project. For more information, visit: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines.

Finding: Less than Significant

Construction GHGs would be emitted by the off-road construction equipment and vehicle travel by workers and material deliveries to the project site. In addition, operational emissions would occur over the life of the Project, primarily from mobile sources. However, as presented in Table 3.3-4, Project GHG emissions would not exceed the quantitative threshold of significance used for this analysis. Thus, the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than significant.

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

Finding: Less than Significant

A project would have a significant impact with respect to GHG emissions and global climate change if it would substantially conflict with the provisions of Section 15064.4(b) of the CEQA Guidelines. Pursuant to Appendix G of the CEQA Guidelines, a significant GHG impact is identified if the project could conflict with applicable GHG reduction plans, policies, or regulations. The Project would be subject to complying with SB 32 and AB 1279. The CARB's 2022 Scoping Plan sets the framework for California to meet the reduction targets of SB 32 and AB 1279. The 2022 Scoping Plan builds upon previous iterations of state scoping plans to achieve carbon neutrality and reduce anthropogenic GHG emissions below 85 percent below 1990 no later than 2045, as directed by AB 1279 (CARB 2022).

Some of the relevant key sectors identified in the 2022 Scoping Plan include transportation sustainability, clean electricity grid, and sustainable manufacturing and buildings. During operations, the Project may require additional employee trips to the site to accommodate the increased treatment capacity. However, all employee vehicles would comply with state regulations governing vehicle fuel efficiency, including the Pavley Regulations and CAFÉ standards. The Project would include implementation of several new electric pumps and blowers. These pieces of equipment would connect to the local electricity grid, which would be required to comply with the RPS. Accordingly, prior to the year 2045, all electricity provided to the project site would be generated by carbon-free sources. With regard to sustainable buildings, the maintenance building proposed as part of the Project would be required to comply with all applicable provisions of the 2022 CalGreen Code, which establishes sustainability requirements for new structures. Furthermore, as an improvement Project that would replace older, inefficient equipment with more efficient electric equipment, the Project inherently supports the overarching sustainability goal of the Scoping Plan. The Project would not conflict with any action items identified in the Scoping Plan, nor preclude achievement of the state's climate goals.

Based on the discussion above, the Project would not conflict with an applicable plan adopted for the purpose of reducing GHG emissions; therefore, the impact would be less than significant.

3.9 Hazards and Hazardous Materials

3.9.1 REGULATORY SETTING

A hazardous material is defined by the California EPA, Department of Toxic Substances Control, as a material that poses a significant present or potential hazard to human health and safety or the environment if released because of its quantity, concentration, or physical or chemical characteristics (26 California Code of Regulations 25501). For the purposes of this analysis, hazardous materials include raw materials and material remaining on-site because of past activities. Applicable regulations and policies considered relevant to the Project are summarized below.

3.9.1.1 Federal Regulations

The principal federal regulatory agency responsible for the safe use and handling of hazardous materials is the EPA. Two key federal regulations pertaining to hazardous wastes are described below. Other applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations.

3.9.1.1.1 Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act enables EPA to administer a regulatory program that extends from the manufacture of hazardous materials to their disposal, thus regulating the generation, transport, treatment, storage, and disposal of hazardous waste at all facilities and sites in the nation.

3.9.1.1.2 Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund, was passed to facilitate the cleanup of the nation's toxic waste sites. In 1986, the Superfund was amended through the Superfund Amendment and Reauthorization Act Title III (community right-to-know laws). Title III states that past and present owners of land contaminated with hazardous substances can be held liable for the entire cost of the cleanup, even if the material was dumped illegally when the property was under different ownership.

3.9.1.2 State Regulations

California regulations are equal to, or more stringent than, federal regulations. EPA has granted the State of California primary oversight responsibility to administer and enforce hazardous waste management to ensure that hazardous wastes are handled, stored, and disposed of properly to reduce risks to human health and the environment. Several key laws pertaining to hazardous wastes are discussed below.

3.9.1.2.1 Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a report that describes their facilities, inventories, emergency response plans and training programs. Hazardous materials are defined as raw

or unused materials that are part of a process or manufacturing step. They are not considered to be hazardous waste. Health concerns pertaining to the release of hazardous materials, however, are similar to those relating to hazardous waste.

3.9.1.2.2 Hazardous Waste Control Act

The Hazardous Waste Control Act created the state hazardous waste management program, which is similar to, but more stringent than, the federal Resource Conservation and Recovery Act program. The act is implemented by regulations contained in Title 26 of the California Code of Regulations, which describes the following required aspects for the proper management of hazardous waste:

- Identification and classification;
- Generation and transport;
- Design and permitting of recycling, treatment, storage, and disposal facilities;
- Treatment standards;
- Operation of facilities and staff training; and
- Closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of them. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from the generator to the transporter to the ultimate disposal location.

3.9.1.2.3 Emergency Services Act

Under the Emergency Services Act, the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an important part of the plan, which is administered by the California Office of Emergency Services. The office coordinates the responses of other agencies, including the EPA, the California Highway Patrol, Regional Water Quality Control Boards, air quality management districts, and county disaster response offices.

3.9.1.2.4 Other Laws, Regulations, and Programs

Various other state regulations have been enacted that affect hazardous waste management, including:

- Safe Drinking Water and Toxic enforcement Act of 1986 (Proposition 65), which requires labeling of substance known or suspected by the state to cause cancer; and
- California Government Code Section 65962.5, which requires the Office of Permit Assistance to compile a list of possible contaminated sites in the state.

State and federal regulations also require that hazardous materials sites be identified and listed in public records. These lists are:

- Comprehensive Environmental Response, Compensation, and Liability Information System
- National Priorities List for Uncontrolled Hazardous Waste Sites
- Resource Conservation and Recovery Act
- California Superfund List of Active Annual Workplan Sites
- Lists of state-registered underground and leaking underground storage tanks.

3.9.1.3 Local Regulations

3.9.1.3.1 Solano County General Plan

The following goal and policies from the Solano County General Plan (Solano County 2008) are referenced as a to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal HS.G-1:** Minimize the potential for loss of life and property resulting from natural or human-caused hazards.
- **Policy HS.P-26:** Minimize the risks associated with transporting, storing, and using hazardous materials through methods that include careful land use planning and coordination with appropriate federal, state, or county agencies.
- **Policy HS.P-29:** Promote hazardous waste management strategies in this order of priority: source reduction, recycling and reuse, on-site treatment, off-site treatment, and residuals disposal.
- **Policy HS.P-30:** Locate facilities for transfer, treatment, storage, and disposal of hazardous wastes using the siting criteria described in the Hazardous Waste Management Plan. The facilities shall be developed and operated to ensure the protection of the environment and compatibility with surrounding land uses.

3.9.1.3.2 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) does not contain any goals or policies that pertain to the Project.

3.9.2 IMPACT ANALYSIS

All hazardous materials are currently regulated and controlled by California EPA in a manner that minimizes risks of spills or accidents. Any hazardous materials used in the construction, start up, or operations of the Project, such as diesel for equipment, would be handled according to current practices.

IV. HAZARDS AND HAZARDOUS MATERIALS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

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

Finding: Less than Significant

Temporary construction activities associated with the Project would involve the transport and use of some hazardous materials typically associated with construction including gasoline, diesel fuel, hydraulic fluid, solvents, and oils. These chemicals would be brought to the project area, as well as transported along the roadways. Federal and state laws regulate the handling, storage and transport of these and other hazardous materials, as well as the mechanisms to respond and clean up any spills along local and regional roadways. Chemicals present on-site or used for the Project would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances.

In a pre-demolition asbestos containing material (ACM) and lead-based paint (LBP) survey for the City of Dixon WWTF that was completed in 2013, traces of asbestos were present in samples taken from the control building and administrative building. All handling and disposal of ACMs and LBP Paint would

comply with all local, state, and federal regulations and requirements. Therefore, the potential for impacts related to hazardous materials transport, use, or disposal is considered less than significant.

b) Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Finding: Less than Significant with Mitigation

As discussed above, ACMs and LBP were discovered in the existing control building and administrative building during a 2013 pre-demolition survey. Therefore, any handling and disposal of asbestos and LBP Paint would comply with all local, state, and federal regulations and requirements, including federal OSHA 29 CFR 1926.62 and the DOSH Section 1532.1 (Lead in Construction Standards)

Construction and operations associated with the Project would involve the transport and use of hazardous materials including gasoline, diesel fuel, hydraulic fluid, solvents, and oils. Chemicals present on-site during project construction would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances, and any spills would be immediately cleaned up and disposed of in the appropriate manner. The project site is not listed by any federal or state database that identifies known hazardous materials sites (EPA 2023, CDTSC 2023).

To ensure hazardous materials are not released into the environment during construction, Mitigation Measure HYD-1 would be implemented and involves the development and implementation of a Spill Prevention Control and Countermeasure Plan ensuring impacts are reduced to a less-than-significant level.

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

Finding: No Impact

The Project is not expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The closest school to the project site is Dixon High School which is approximately three miles from the project area. Construction and operations associated with the Project would involve the transport and use of hazardous materials including gasoline, diesel fuel, hydraulic fluid, solvents, and oils. Chemicals present on-site during project construction would be handled by the contractor in accordance with applicable federal, state, and local regulations for hazardous substances, and any spills would be immediately cleaned up and disposed of in the appropriate manner. Therefore, no impacts would occur.

d) Would the Project 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?

Finding: No Impact

A review of the EPA hazardous materials sites database did not identify the project area as a known hazardous materials sites (EPA 2023). Therefore, no impacts would occur.

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

Finding: Less than Significant

The closest public airport to the project site is the Nut Tree Airport located approximately 7.7 miles away from the project area. However, the Project is not within the Nut Tree Airport influence area according to the Solano County General Plan (Solano County 2008). The project area is within the Travis Air Force Base influence area. The 2002 Travis Air Force Base Land Use Compatibility Plan (LUCP) designates the project area as being located in Travis Air Force Base Compatibility Zone C. "Compatibility Zone C — Zone C encompasses locations exposed to potential noise in excess of approximately 60 dB CNEL together with additional areas occasionally affected by concentrated numbers of low-altitude (below 3,000 feet MSL) aircraft overflights. The boundaries are delineated so as to follow section lines, other geographic features, and fixed offset distances from the extended runway centerlines. Developed residential areas within existing city limits are excluded." For Compatibility Zone C, ALUC review is required for any proposed object taller than 100 feet. Additionally, while not requiring ALUS review, caution should be used for any objects over 50 feet tall located on a site that is substantially higher than surrounding terrain. For the Project, the site is not located on a substantially higher area than surrounding terrain and none of the buildings or construction equipment is expected to be over 50 feet tall and the project area is on flat terrain. This Project would not result in a safety hazard for people residing or working in the project area. Therefore, impacts are considered less than significant.

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

Finding: Less than Significant

Access for all fire, police, and emergency response vehicles would be maintained into and out of the project site at all times throughout the construction period. Construction would take place within the existing City of Dixon WWTF and construction would not block any nearby public roads or access roads within the WWTF. Therefore, impacts to an emergency response plan or emergency evacuation plan are considered less than significant.

g) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Finding: Less than Significant

According to the Solano County General Plan, Figure HS-9 Wildland Fire Hazard Areas, the project area is in an area designated as both Low or None and Moderate for wildland fires. While the project area has a low to moderate risk of wildland fires, the risk of fire is always a possibility. Equipment used during trenching, grading and other construction activities may generate sparks that could ignite dry vegetation

on or adjacent to the construction area and cause wildland fires in the area. The project site is in the jurisdiction of the Dixon Fire Department. The closest fire station to the project site is the Dixon Fire Department, located at located at 205 Ford Way, Dixon, California, approximately four miles from the project site. Therefore, impacts are considered less than significant.

3.9.3 MITIGATION MEASURES

Mitigation Measure HYD-1: Develop or use current Spill Prevention Control and Countermeasure Plan (SPCCP).

- The City of Dixon or its contractor will develop and implement an SPCCP to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities for all contractors.
- The City of Dixon will review and approve the SPCCP before onset of construction activities. The City of Dixon will routinely inspect the construction area to verify that the measures specified in the SPCCP are properly implemented and maintained. The City of Dixon will notify its contractors immediately if there is a noncompliance issue and will require compliance.
- The federal reportable spill quantity for petroleum products, as defined in the EPA's CFR (40 CFR 110) is any oil spill that (1) violates applicable water quality standards, (2) causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or (3) causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- If a spill is reportable, the City of Dixon or the contractor would take action to contact the appropriate safety and cleanup crews to ensure the SPCCP is followed. A written description of reportable releases must be submitted to the Regional Water Quality Control Board. The submittal must include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.

3.9.3.1 Mitigation Measure HYD-1 Implementation

- **Responsible Party:** The City of Dixon or its contractor will develop and implement a SPCCP to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities for all contractors.
- **Timing:** The SPCCP will be implemented prior to and during all phases of construction.
- **Monitoring and Reporting**: Evaluation of SPCCP will be conducted by the City of Dixon. Reports of the SPCCP implementation will be documented and kept on file at the City of Dixon offices.
- **Standard of Success:** Minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities for all contractors.

3.10 Hydrology and Water Quality

3.10.1 ENVIRONMENTAL SETTING

Relative to water quality and hydrology, the project site is located within the Lower Sacramento Watershed. The California Department of Water Resources does not have any data on the groundwater quality in the project area (DWR 2023).

3.10.2 REGULATORY SETTING

3.10.2.1 Federal Regulations

3.10.2.1.1 Clean Water Act

The CWA (33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Section 401 of the CWA regulates surface water quality and a Water Quality Certification is required for federal actions (including construction activities) that may entail impacts to surface water. In California, NPDES permitting authority is delegated to, and administered by, the nine RWQCBs.

3.10.2.1.2 National Flood Insurance Policy Act

The Federal Emergency Management Agency (FEMA) is responsible for managing the National Flood Insurance Program, which makes federally backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage.

The National Flood Insurance Program, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level (known as base flood elevation). To facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements.

3.10.2.1.3 NPDES General Construction Permit

The NPDES was established per 1972 amendments to the Federal Water Pollution Control Act, in order to control discharges of pollutants from point sources (Section 402). As described above, under “Federal,” 1987 amendments to the CWA, created a new section of the Act devoted to storm water permitting (Section 402[p]), with individual states designated for administration and enforcement of the provisions of

the CWA and the NPDES permit program. The SWRCB issues both General Construction Permits and individual permits under this program.

Projects disturbing more than one acre of land during construction are required to file a Notice of Intent with the SWRCB to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activity. The project proponent must implement control measures that are consistent with the State General Permit. A SWPPP must be developed and implemented for each site covered by the General Permit. A SWPPP describes BMPs the discharger would use to protect storm water runoff and reduce potential impacts to surface water quality through the construction period. The SWPPP must contain the following: a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment (SWRCB 2023).

3.10.2.2 Local Regulations

3.10.2.2.1 Solano County General Plan

The following goal and policies from the Solano County General Plan (Solano County 2008) are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Goal RS.G-10:** Foster sound management of the land and water resources in Solano County's watersheds to minimize erosion and protect water quality using BMPs and protect downstream waterways and wetlands.
- **Policy RS.P-66:** Together with the Solano County Water Agency, monitor and manage the county's groundwater supplies.
- **Policy RS.P-71:** Ensure that land use activities and development occur in a manner that minimizes the impact of earth disturbance, erosion, and surface runoff pollutants on water quality.
- **Policy RS.P-73:** Use watershed planning approaches to resolve water quality problems. Use a comprehensive stormwater management program to limit the quantity and increase the water quality of runoff flowing to the county's streams and rivers.
- **Policy RS.P-74:** Identify naturally occurring and human-caused contaminants in groundwater in new development projects and develop methods to limit and control contaminants. Work with RWQCB to educate the public on evaluating the quality of groundwater.
- **Policy RS.P-75:** Require and provide incentives for site plan elements (such as permeable pavement, swales, and filter strips) that limit runoff and increase infiltration and groundwater recharge.
- **Policy HS.P-3:** Require new developments to incorporate devices capable of detaining the stormwater runoff caused by a 100-year storm event or to contribute to regional solutions to improve flood control, drainage, and water recharge.

- **Policy HS.P-4**: Encourage the use of stormwater detention that may also be used for groundwater recharge.

3.10.2.2.2 City of Dixon General Plan

- **Goal NE-1:** Preserve, protect, and enhance natural resources, habitats, and watersheds in Dixon and the surrounding area, promoting responsible management practices.
- **Goal NE-2:** Use energy and water wisely and promote reduced consumption.
- **Policy NE-2.4:** Encourage the retention and reuse of rainwater on-site and promote the use of rain barrels or other rainwater reuse or green infrastructure systems throughout the community.
- **Policy NE-2.8:** Conserve water through the planting and maintenance of trees, which will provide for the capture of precipitation and runoff to recharge groundwater, in addition to providing shading for other landscaping to reduce irrigation requirements. Ensure that any 'community greening' projects utilize water-efficient landscape.
- **Goal NE-4:** Protect life and property from natural and human-made hazards and provide quick, effective response to disasters and emergencies.
- **Policy NE-4.8:** Prohibit new critical and essential public services and facilities from being located in the floodplain, as shown on Figure NE-7 of the General Plan. Retrofit existing facilities to be flood resilient and remain operational in the event of a flood**.**
- **Goal NE-5:** Minimize air, soil, noise, and water pollution as well as community exposure to hazardous conditions.
- **Policy NE-5.5:** Encourage development to minimize grading related to the topography and natural features in order to limit soil erosion.
- **Policy NE-5.6:** Require construction projects that disturb 10,000 square feet of ground cover revegetate graded areas with native or locally appropriate vegetation to restore biological diversity and minimize erosion and soil instability.
- **Policy NE-5.9:** Protect surface water and groundwater resources from contamination from point (single location) and non-point (many diffuse locations) sources by pursuing strategies to minimize the pollutant and sediment levels entering the hydrological system through stormwater, agricultural, and other urban runoff.
- **Goal PSF-2:** Plan and provide utilities and infrastructure to deliver safe, reliable, and adequate services for current and future residents and businesses.
- **Policy PSF-2.11:** Encourage project designs that minimize drainage concentrations, minimize impervious coverage, utilize pervious paving materials, utilize low impact development strategies, and utilize BMPs to reduce stormwater runoff.

3.10.2.2.3 City of Dixon Municipal Code 9.04.080 Provisions for Flood Hazard Reduction

A. Standards of Construction. In all areas of special flood hazards, the following standards are required:

1. Anchoring.

    a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

2. Construction Materials and Methods.

    a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

    b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

    c. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

    d. Require within Zones AH or AO adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures.

3. Elevation and Flood Proofing.

    a. New construction of any structure shall have the lowest grade of the pad elevated one (1) foot above the base flood elevation. Substantially improved structures may meet standards in subsection (A)(3)(b) of this Section. Substantially improved nonresidential structures may meet standards in subsection (A)(3)(c) of this Section. Upon the completion of the foundations, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the community Building Inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

    b. Substantially improved structures shall either be elevated in conformance with subsection (A)(3)(a) of this section or be elevated so that the lowest floor, including basement, is at least two (2) feet above the base flood elevation. Substantially improved nonresidential structures may meet the standards in subsection (A)(3)(c) of this Section. Upon completion of the substantial improvement, the elevation of the lowest floor including basement shall be certified by a registered professional engineer or surveyor, and verified by the City Building Inspector to be properly elevated. Such certification and verification shall be provided to the Floodplain Administrator.

c. Substantially improved nonresidential structures shall either be elevated in conformance with subsection (A)(3)(a) or (b) of this section or, together with attendant utility and sanitary facilities:

i. Be floodproofed below the elevation specified in subsection (A)(3)(a) or (b) of this section so that the structure is watertight with walls substantially impermeable to the passage of water;

ii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

iii. Be certified by a registered professional engineer or architect, and verified by the City Building Inspector, that the standards of this subsection are satisfied. Such certifications shall be provided to the Floodplain Administrator.

d. Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood water. Designs for meeting this requirement must exceed the following minimum criteria:

i. Be certified by a registered professional engineer or architect to comply with the guidelines for engineered opening in FEMA Technical Bulletin 193; or a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves or other coverings or devices; provided, that they permit the automatic entry and exit of flood waters.

B. Standards for Utilities. The standards for utilities are as follows:

1. All new and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.

2. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

In addition, the city Code specifies that:

F. **Floodways.** Located within areas of special flood hazard established in DMC 9.04.060 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

   If subsection (F)(1) of this section is satisfied, all new construction, substantial improvement, and other proposed new development shall comply with all other applicable flood hazard reduction provisions in this section. [Ord. 12-004.]

3.10.3 IMPACT ANALYSIS

IX. HYDROLOGY AND WATER QUALITY Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		X		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;		X		
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or		X		
iv) impede or redirect flood flows?		X		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

a) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Finding: Less than Significant with Mitigation

The Project has been designed to improve water quality of treated water and conserve water by minimizing water evaporation during treatment. Maintenance and operation of equipment would require the use of hazardous materials such as gasoline and engine oil, which, if spilled, could contaminate runoff which can contaminate nearby waterways.

Also, during construction, the Project could result in additional sources of polluted discharge such as hazardous materials and sediment that could violate certain water quality standards. Implementation of BMPs and Mitigation Measure HYD-1 regarding spill prevention would mitigate potentially significant polluted discharges and runoff. Furthermore, Mitigation Measures GEO-1(Section 3.6 above) regarding erosion and sediment control and HYD-1 would be implemented to reduce the potential for contaminants to enter nearby waterways.

b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Finding: Less than Significant

The Project involves improvements to the existing City of Dixon WWTF. The Project would improve water quality of treated water and conserve water usage due to the use of more modern and efficient treatment methods. Therefore, the Project would not substantially deplete groundwater supplies. With this Project, more WWTF effluent would recharge local groundwater and the water quality of the water being recharged to local groundwater would be improved over current WWTF operations.

Therefore, the use of/or impacts to groundwater during construction or operation are considered less than significant and***,*** in this case***,*** beneficial.

c) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on- or off-site?

Finding: Less than Significant

The Project would include an additional oxidation ditch, although this would alter the drainage pattern where the new oxidation ditch would be installed, water would be contained within the ditch and would not result in runoff. The Project does not involve the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. Therefore, impacts are considered less than significant.

ii, iii, iv) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

Finding: Less than Significant with Mitigation

The Project could result in polluted runoff during construction (refer to the answer for a, f above). Implementation of BMPs and Mitigation Measure HYD-1 to minimize the potential for polluted runoff due to the Project would reduce impacts to less than significant. Any potentially contaminated stormwater, specifically surrounding the vector receiving station, solids handling facilities, and headworks dumpsters, would be diverted back to the influent pump station for additional treatment, therefore impacts would be less than significant.

d) Would the Project expose people or structures to a significant risk of loss, injury or death as a result of inundation of seiche, tsunami, or mudflow?

Finding: No Impact

The Project's inland location negates the risk of a tsunami. The probability of a seiche occurring in northeastern Solano County is considered negligible. Furthermore, given the geologic context of the Project, if such an event were to occur, the likelihood of it exposing Project structures or people to a significant risk of injury or death is considered low. Finally, the geologic materials underlying the project area are generally not associated with mudslides and the Project is located on relatively flat slopes; therefore, there is little or no risk of seiche, tsunami, or mudflow (CDC 2022b). Therefore, there is no risk of a tsunami, seiche, or the potential risk of injury due to mudflow, and there is no impact.

e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Finding: Less than Significant

While the Project is located within a 100-year flood hazard area (FEMA 2021), construction of all new facilities would occur above the calculated floodplain elevation and therefore would not be flooded during a 100-year flood. Additionally, no new Project structures would expose people to loss, injury, or death involving flooding since 1) the structures would be located above the calculated floodplain elevation, 2) the design and construction of new oxidation ditch would ensure that no breaching of either causing flooding would occur, and 3) the Project does not include work associated with a levee or dam. The Project would also comply with the City of Dixon Municipal Code 9.04.080 Provisions for flood hazard reduction. Therefore, impacts are considered less than significant.

3.10.3.1 Mitigation Measures

Mitigation Measure HYD-1, see Section 3.10.

3.11 Land Use and Planning

3.11.1 ENVIRONMENTAL SETTING

The project site is designated as Public Facilities land use in the City of Dixon General Plan (City of Dixon 2021) and designated as Public/Quasi-Public land by the Solano County General Plan (Solano County 2008). Land surrounding the project area is primarily designated for Agriculture in the Land Use Map and is being farmed with annual crops. The project site is zoned as Public Service in the Solano County General Plan (Solano County 2008).

3.11.2 REGULATORY SETTING

3.11.2.1 State Regulations

The state mandates that all city and county codes and ordinances be followed.

3.11.2.2 Local Regulations

3.11.2.2.1 Solano County General Plan

The following policy from the Solano County General Plan (Solano County 2008) is referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Policy LU.P-31:** Require that all development within the airport land use compatibility areas/safety zones of the airports complies with the Airport Land Use Commission compatibility polices and criteria as set forth in the airports' land use.

3.11.2.2.2 City of Dixon General Plan

The Dixon City Council adopted the updated 2040 General Plan in May 2021. The WWTF upgrades and increased capacity are based on land use designations identified in the updated general plan. Therefore, land use distributions throughout the city and growth anticipated from this land use distribution was previously reviewed and disclosed to the public.

The project site is designated for Public Facilities land uses in the general plan. The existing and planned improvements to the WWTF are consistent with the general plan and would be developed in compliance with related Zoning Code provisions.

3.11.3 IMPACT ANALYSIS

X. LAND USE AND PLANNING Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

a) Would the Project physically divide an established community?

Finding: No Impact

The Project involves improvements to the existing City of Dixon WWTF. The project site is designated as Public Facilities land use the City of Dixon General Plan (City of Dixon 2021) and designated as Public/Quasi-Public land by the Solano County General Plan (Solano County 2008). Land surrounding the project area is primarily designated for Agriculture in the Land Use Map and is being farmed with annual crops. The project site is zoned as Public Service in the Solano County General Plan (Solano County 2008). There are little to no residential communities within close proximity to the project area with the exception of scattered houses on the surrounding agricultural lands. The closest house to the Project is located over 0.2 mile away from the Dixon WWTF. There is no risk of dividing an established community as a result of the Project. Therefore, no impacts would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Finding: No Impact

The Project would not conflict with any land use plans, policies, or regulations of an agency with jurisdiction over the Project. The Project is consistent with the general plan and would be developed and operated in compliance with the city's Zoning Code. The Project is listed as an Airport Area of Influence for the Travis Air Force Base and would comply with the Airport Land Use Commission compatibility polices and criteria as set forth in the 2015 Travis Air Force Base LUCP. Therefore, the Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project. Therefore, no impacts would occur.

3.12 Mineral Resources

3.12.1 ENVIRONMENTAL SETTING

Mineral resources are generally finite and occur in sporadic deposits, which often create a relative scarcity and a need to protect access to supplies. Many mineral resources are important to global, national, state, and local economies. According to the Solano County General Plan (Solano County

2008), “Solano County is rich in a number of nonfuel mineral resources. Mineral resources mined or produced within Solano County include mercury, sand and gravel, clay, stone products, calcium, and sulfur” (Solano County 2008). No area in the vicinity of the Project is zoned as a mineral reserve by Solano County (Solano County 2008).

3.12.2 REGULATORY SETTING

3.12.2.1 Federal Regulations

3.12.2.1.1 The Mining and Minerals Policy Act of 1970 (30 U.S.C 21(a))

The Mining and Minerals Policy Act of 1970 declared that it is in the national interest to foster and encourage private enterprise in the following ways:

- Development of economically sound and stable domestic mining and mineral related industries.
- Orderly and economic development of mineral resources to satisfy industrial, security, and environmental needs.
- Research to promote wise and efficient use of resources.
- Research and development of mining and reclamation methods to lessen the impact of mining on the environment.

This act codified the importance of mining and mineral resources and recognized that public policy should evaluate these resources.

3.12.2.2 State Regulations

3.12.2.2.1 Surface Mining and Reclamation Act

The State of California enacted the Surface Mining and Reclamation Act (SMARA) in 1975 in part to identify the location of and preserve access to significant mineral deposits. The state geologist is required by SMARA to prepare maps that identify mineral resource zones (MRZ) including areas of presence or likely presence of significant mineral deposits, MRZ-2. Areas that may have mineral resources, but where the presence cannot be determined from available information are also identified as MRZ-3. Additionally, SMARA requires local governments to evaluate the presence of mineral resources in their General Plans and when making land use decisions.

3.12.2.3 Local Regulations

3.12.2.3.1 Solano County General Plan

The policy listed below is from the Solano County General Plan (Solano County 2008) and is referenced to support local policies and programs that may or may not be supported by the City of Dixon.

- **Policy RS.P-33:** The County shall preserve, for future use, areas with important mineral resources by preventing residential, commercial, and industrial development that would be incompatible with mining practices to the extent feasible.

3.12.2.3.2 City of Dixon General Plan

There are no general plan mineral resource goals or policies that pertain to the Project.

3.12.3 IMPACT ANALYSIS

XI. MINERAL RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X

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?

Finding: No Impact

The project site does not fall within an area classified as MRZ-2 according to the Solano County General Plan (Solano County 2008) Figure RS-4 Mineral Resources. Therefore, the Project would not result in the loss of availability of a known mineral resource classified MRZ-2 and no impacts would occur.

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?

Finding: No Impact

The Project would not 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 according to the Solano County General Plan (Solano County 2008). Therefore, no impacts would occur.

3.13 Noise

3.13.1 ENVIRONMENTAL SETTING

The existing noise environment in the vicinity of the project area is primarily rural with agricultural land use surrounding the project area. The noise environment is characterized by noise from vehicles on surrounding roadways, including Hwy 113 and occasional air traffic noise from Travis Air Force Base. The

Project activities are not directly adjacent to any sensitive receptors. There are little to no residential communities close to the project area with the exception of scattered houses on the surrounding agricultural lands. The closest house to the Project is located over 1,065 feet away from the project area.

3.13.2 REGULATORY SETTING

3.13.2.1 Local Regulations

3.13.2.1.1 Solano County General Plan

The following goals from the Solano County General Plan (Solano County 2008) are referenced to support local policies and programs that may or may not be supported by the City of Dixon

- **Goal HS.G-3:** Protect people living, working, and visiting Solano County from the harmful impacts of excessive noise.
- **Goal HS.G-4:** Protect important agricultural, commercial, and industrial uses in Solano County from encroachment by land uses sensitive to noise and air quality impacts.

Table 3.13-1. Land Use Noise Compatibility Guidelines

Land Use Category	Normally Acceptable 1	Conditionally Acceptable 2	Normally Acceptable 3	Clearly Unacceptable 4
Industrial, Manufacturing, Utilities, Agricultural	<75	70-80	75+	n/a

Source: Solano County General Plan (Solano County 2008)
Notes:
1. Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
2. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
3. New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.
4. New construction or development should generally not be undertaken.

Key:
CNEL = community noise equivalent level
dBA = A-weighted decibel
Ldn = day-night average noise level

- **Policy HS.P-48:** Consider and promote land use compatibility between noise-sensitive and noise generating land uses when reviewing new development proposals.
- **Policy HS.P-49:** Encourage design that minimizes negative effects of noise without compromising aesthetic values and pedestrian and auto connectivity.
- **Policy HS.P-50:** Ensure that development in the vicinity of the Travis Air Force Base or the Rio Vista or Nut Tree airports is compatible with existing and projected airport noise levels.
- **Policy HS.P-52:** Minimize noise conflicts between current and proposed land uses and transportation networks by encouraging compatible land uses around critical areas with higher noise potential.

3.13.2.1.2 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) contains policies that pertain to Project, including the following:

- **Policy NE-5.18** Ensure that noise does not have a substantial, adverse effect on the quality of life in the community.
- **Policy NE-5.19** Apply the general plan noise and land use compatibility standards to all new residential, commercial, and mixed-use development and redevelopment, as shown in Table 3.13-1.

3.13.3 IMPACT ANALYSIS

XII. NOISE Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Generation of excessive groundborne vibration or groundborne noise levels?		X		
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?		X		

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

Finding: Less than Significant with Mitigation

Project construction entails the use of mechanical equipment, such as backhoes, dump truck, excavators, etc. Noise impacts associated with the project construction would result in temporary or periodic increases in ambient noise levels. Construction noise would result from operation of machinery and equipment used in the construction process. Construction activities would occur during the daytime hours between 7:00 a.m. and 7:00 p.m. The Project activities are not directly adjacent to any sensitive receptors. There are no residential communities close to the project area with the exception of scattered houses in the surrounding agricultural lands. The closest house to the Project is located over 0.2 mile away from the project area. Noise impacts associated with project construction would result in temporary

or periodic increases in ambient noise levels. To ensure that noise remains at or below acceptable levels, Mitigation Measure NOISE-1 would be implemented to reduce impacts to less-than-significant levels.

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

Finding: Less than Significant with Mitigation

Mechanical equipment used during the project construction is expected to generate localized ground borne vibration and increased noise levels during the 12-to-24-month construction period. However, vibration from construction activity is typically below the threshold of perception when the activity is more than 50 feet from the receiver. These temporary increased noise and vibration levels would occur during daylight hours between 7:00 a.m. and 7:00 p.m. To ensure that noise remains at or below acceptable levels, Mitigation Measure NOISE-1 would be implemented. Therefore, ground borne noise and vibration impacts are considered less than significant with Mitigation Measure NOISE-1 implemented.

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

Finding: Less than Significant with Mitigation

The project area is within the Travis Air Force Base influence area. The 2002 Travis Air Force Base LUCP designates the project area as being located in Travis Air Force Base Compatibility Zone C. "Compatibility Zone C — Zone C encompasses locations exposed to potential noise exceeding approximately 60 dB CNEL together with additional areas occasionally affected by concentrated numbers of low-altitude (below 3,000 feet MSL) aircraft overflights. The boundaries are delineated so as to follow section lines, other geographic features, and fixed offset distances from the extended runway centerlines. Developed residential areas within existing city limits are excluded." The Project does not involve any new residents that might be impacted from noise impacts of Travis Air Force Base. The periodic noise impacts from Travis Air Force Base are at an acceptable level for people who work at the WWTF. In order to ensure that noise remains at or below acceptable levels, Mitigation Measure NOISE-1 would be implemented and impacts are considered less than significant.

3.13.4 MITIGATION MEASURES

3.13.4.1 Mitigation Measure NOISE-1: Noise Reduction Measures

The City of Dixon's chosen contractor would incorporate the following BMPs to minimize noise impacts during construction activities.

- Construction will be limited to daytime hours between 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays and Sundays.
- All construction equipment will be equipped with sound-control devices no less effective than those provided on the original equipment. Equipment will have exhaust mufflers.

- Appropriate additional noise-reducing measures will be implemented, including but not limited to:
  - Changing the location of stationary construction equipment when practical.
  - Shutting off idling equipment.

3.13.4.2 Mitigation Measure NOISE-1 Implementation

- **Responsible Party:** The City of Dixon will ensure the City's chosen contractor adheres to the construction schedule and noise mitigation measures.
- **Timing:** During all phases of construction.
- **Monitoring and Reporting:** The City of Dixon's Construction Manager will document all after hour work that generates noise louder than background noise levels.
- **Standard of Success:** Minimize noise complaints and reduce overall noise impacts.

3.14 Population and Housing

3.14.1 ENVIRONMENTAL SETTING

The Project is in the City of Dixon, southeast of the city center, in northeast Solano County, within the existing City of Dixon WWTF along Pedrick Road and the existing WWTF Disposal Area southeast of the WWTF.

3.14.2 REGULATORY SETTING

3.14.2.1 Local Regulations

3.14.2.1.1 Solano County General Plan

- **Objective G:** Provide for residential development that is generally self-sufficient in regard to water supply and sewage disposal, requiring only minimal public facilities and services essential for health, safety, and welfare.

3.14.2.1.2 City of Dixon General Plan

The project site is designated for Public Facilities land uses in the general plan and consistently zoned Public Facilities. The existing and planned improvements to the WWTF are consistent with the updated general plan. The Project was designed based on the land use designation contemplated in the updated 2040 General Plan. The Project would be consistent with the following sewer needs identified in the general plan:

The general plan also contains policies and actions that ensure that Dixon would have adequate capacity to safely accommodate the wastewater needs of existing and future residents in the wastewater service

area, including through ensuring compliance with state water treatment standards and by increasing the WWTF, trunk sewer, and pump capacities.

3.14.3 IMPACT ANALYSIS

XIII. POPULATION AND HOUSING: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

a) Induce substantial unplanned 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)?

Finding: Less than Significant

The US Census Bureau estimates that the city's population, as of July 2022 was 19,143. Population in the city has increased 0.8 percent between April 2020 and July 2022. The Project would accommodate the city's General Plan population projections of 28,50 people by 2040. This growth was studied within the general plan and related EIR (SCH#: 2018112035) (City of Dixon 2021). Therefore, CEQA environmental review was previously conducted on these growth levels and related growth inducing impacts. Environmental impact thresholds of significance for the Project rely on previous CEQA findings of the general plan, which previously circulated for public input and adopted by the city. Therefore, the Project would not contribute to significant cumulative indirect growth impacts in the region over that previously disclosed and/or studied in the city's General Plan. Therefore, impacts are considered less than significant.

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

Finding: No Impact

The Project involves improvements to the existing City of Dixon WWTF. The Project activities are not directly adjacent to any houses. There are little to no residential communities close to the project area with the exception of scattered houses on the surrounding agricultural lands. The closest house to the Project is located over 0.2 mile away from the project area. Therefore, the Project would not displace any existing housing or necessitate the construction of replacement housing elsewhere and therefore, no impacts would occur.

3.15 Public Services

3.15.1 ENVIRONMENTAL SETTING

Public services are typically provided by fire districts, park districts, public utility districts, school districts, sewer districts, water districts, and other single purpose districts in addition to those provided by the City of Dixon, Solano County, and any state and federal agencies. Fire protection in the project area is provided by the Dixon Fire Department and police protection is under the jurisdiction of the Dixon Police Department. The project area is within the Dixon Unified School District.

3.15.1.1 Fire Protection

The closest fire station to the project site is the Dixon Fire Department, located at 205 Ford Way, Dixon, California, approximately four miles from the project site. The Dixon Fire Department is responsible for any fire-related emergencies within the project area.

3.15.1.2 Police Protection

The project area falls under the jurisdiction of the Dixon Police Department, who is responsible for police protection and public safety in the vicinity of the project area. The nearest location of law enforcement services provided by the Dixon Police Department is located at 201 West A Street, Dixon, California.

3.15.1.3 Schools

The project area is within the Dixon Unified School District. The nearest school is Dixon High School which is three miles from the project site.

3.15.2 REGULATORY SETTING

3.15.2.1 Local Regulations

3.15.2.1.1 Solano County General Plan

The following goals and policies from the Solano County General Plan (Solano County 2008) are referenced to support local policies and programs that may or may not be supported by the City of Dixon.

- **Goal PF.G-1:** Provide adequate public services and facilities to accommodate the level of development planned by the County.
- **Goal PF.G-2:** Ensure that residents throughout Solano County have access to essential public facilities and services.
- **Goal PF.G-3:** Provide effective and responsive fire and police protection, and emergency response service.

- **Policy PF.P-1**: Provide public facilities and services essential for health, safety, and welfare in locations to serve local needs.
- **Policy PF.P-3:** Increase efficiency of water, wastewater, stormwater, and energy use through integrated and cost-effective design and technology standards for new development and redevelopment.

3.15.2.1.2 City of Dixon General Plan

- **Goal PSF-2**: Plan and provide utilities and infrastructure to deliver safe, reliable, and adequate services for current and future residents and businesses.
- **Policy PSF-2.6** Provide wastewater collection and treatment services, ensuring that adequate capacity is available to serve existing and future need in the community and that effluent can be treated and disposed in accordance with RWQCB standards.

3.15.3 IMPACT ANALYSIS

XIV. PUBLIC SERVICES and UTILITIES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	

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

Finding: Less than Significant

The Project is designed to accommodate the levels of public services that were studied within the City of Dixon General Plan (City of Dixon 2021). CEQA was conducted on the existing levels of development within the City of Dixon General Plan and the CEQA findings were circulated for public input and adopted

by the City. The Project would not result in the need for additional government facilities and would have a less-than-significant impacts on fire protection, police protection, schools, or parks in the proximity of the project area. The Project was designed to be consistent with the goals of the general plan. There would also be no interruption in wastewater treatment during the Project. Therefore, this impact is considered less than significant.

3.16 Recreation

3.16.1 IMPACT ANALYSIS

XV. RECREATION Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Finding: Less than Significant

The project site is not on or near any recreational facilities and would not increase or require the construction of other recreational facilities as a result of the Project. The Project would not directly introduce new residents to Dixon that would result in increased recreational demands. Since the Project is a WWTF improvements Project no impacts would occur relevant to the use or deterioration of recreational facilities.

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Finding: No Impact

The Project does not involve recreational facilities or require the construction or expansion of recreational facilities. No adverse physical effect on the environment would occur involving parks or recreational facilities. Therefore, no impacts would occur.

3.17 Transportation

3.17.1 ENVIRONMENTAL SETTING

The main roads on which project construction equipment and truck trips would occur are Highway 80, Highway 113, Pedrick Road, and Casey Road. According to the City of Dixon General Plan, Highway 80 is considered an interstate corridor, Highway 113 and Pedrick Road are considered a principal arterial road, and Casey Road is classified as an arterial roadway.

3.17.2 REGULATORY SETTING

3.17.2.1 Local Regulations

3.17.2.1.1 Solano County General Plan

There are no general plan transportation and traffic goals or policies that pertain to the Project.

3.17.2.1.2 City of Dixon General Plan

- **Policy M-1.1** Maintain a transportation network that is efficient and safe, that removes barriers (e.g., accessibility near freeways and rail lines), and that optimizes travel by all modes.

3.17.3 IMPACT ANALYSIS

XVI. TRANSPORTATION and TRAFFIC Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?		X		

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

Finding: Less than Significant

Construction of the Project would result in a temporary increase in truck trips on the local streets in order to deliver materials and machinery to the site. There would also be a limited number of vehicle trips from the work crew during the construction work hours. The Project involves improvements to the existing City

of Dixon WWTF and construction and operation would take place within the boundaries of the existing WWTF. As such project construction and operation immediately adjacent to any roadways and general construction trips to and from the project area would maintain LOS C or better which is considered less than significant.

b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Finding: Less than Significant

Pursuant to Section 15064.3(b) of the CEQA Guidelines, a project that would reduce or have no impact on vehicle miles traveled should be presumed to have a less-than-significant impact. The Project would not result in additional truck trips during operation beyond current conditions and, therefore, would be consistent with CEQA Guidelines Section 15064.3(b). Construction of the Project would result in temporary material haul trips and worker trips throughout the construction period. These truck trips would be limited in duration and daily quantity, averaging about 10 truck trips per day during peak construction periods, and would be sporadic over the duration of construction, with more truck trips occurring during material delivery and fewer truck trips during installation of Project features. These additional truck trips would not result in a substantial increase in vehicle miles traveled and, therefore, construction of the Project would also be consistent with the CEQA Guidelines Section 15064.3(b). The impact would be less than significant.

c) Would the Project substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Finding: Less than Significant

The Project would take place within the existing City of Dixon WWTF and construction and operation of the Project does not include any new design features on roadways. The Project would not result in any associated hazards. Therefore, impacts are considered less than significant.

d) Would the Project result in inadequate emergency access?

Finding: Less-Than-Significant Impact with Mitigation

The Project would take place within the existing City of Dixon WWTF and construction and operation of the Project would not result in inadequate emergency access. In order to ensure the Project would not result in inadequate emergency access, Mitigation Measure TR-1 would be implemented. Therefore, impacts to emergency access are considered less than significant with mitigation incorporated.

3.17.4 MITIGATION MEASURES

3.17.4.1 Measure TR-1: Prepare Plan for Traffic Control, Including Emergency Access.

Prior to the commencement of construction, the City of Dixon or its contractor will prepare a plan to minimize interference with normal traffic flows. The plan may include, but is not limited to the following measures, which are similar to those required by a Solano County Encroachment Permit:

- **Protection of Traffic:** Adequate provision will be made for the protection of the traveling public. Barricades will be fitted with lights at night. All traffic control, including devices and personnel requirements, will be as required by the current State of California Manual of Traffic Controls for Construction and Maintenance Work Zones.
- **Minimum Interference with Traffic:** All work will be planned and carried out so as to create the least possible inconvenience to the traveling public. Traffic will be permitted to pass at all times unless otherwise specified. One-way traffic may be maintained in the area of work only during daylight hours. Two-way traffic will be maintained at all times during hours of darkness and during daylight hours, where practical.
- **Storage of Material:** No material will be stored within 8 feet of the edge of the pavement or traveled way or with the shoulder lines where the shoulders are wider than 8 feet.
- **Clean Up Right-of-Way:** During construction, the paved roadway surfaces will be kept free of dirt or gravel as much as practical. Any potential hazard, such as mud or gravel will be removed immediately. Upon completion of the work, all materials will be removed and the right-of-way left in as presentable a condition as before the work started.

3.17.4.2 Mitigation Measure TR-1 Implementation

- **Responsible Party**: City of Dixon or the Contractor will prepare a plan to minimize interference with normal traffic flows. Document road conditions preconstruction to provide a basis for restoration.
- **Timing:** Ongoing during Construction Monitoring and Reporting: City of Dixon will ensure that the Contractor follows the plan.
- **Standard of Success**: Traffic will be protected; there will be minimal interference with traffic, and the rights-of-way cleaned up during construction and after.

3.18 Tribal Cultural Resources

This section was developed by Stantec Consulting pursuant to Section 15064.5 of the CEQA Guidelines. The purpose was to (1) identify and record cultural resources in the project area; (2) make preliminary evaluations of such resources' significance according to the criteria of the CRHR; and (3) recommend procedures for avoidance or mitigation of adverse effects to CRHR-eligible resources.

3.18.1 ENVIRONMENTAL SETTING

This environmental setting provides a brief overview of the prehistoric and historic periods in eastern Solano County and the City of Dixon. This information is provided as context within which to interpret the cultural resources identified in the project area. The following is an excerpt from the Basin Research Associates, Inc., and Uribe & Associates (1996) Archaeological Sensitivity Review: NCS Stockton, San Joaquin County and NRFT Dixon, Solano County for Engineering Field Activity, West Naval Facilities Engineering Command Report, and the City of Dixon General Plan (City of Dixon 2021).

3.18.2 REGULATORY SETTING

3.18.2.1 Federal Regulations

3.18.2.1.1 National Historic Preservation Act

Most regulations at the federal level stem from NEPA and historic preservation legislation such as the NHPA of 1966, as amended. NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations (Section 106) which pertain to all projects (including the Project) that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. Provisions of NHPA establish the NRHP maintained by the National Park Service, the Advisory Councils on Historic Preservation, State Historic Preservation Offices, and grants-in-aid programs.

3.18.2.2 State Regulations

3.18.2.2.1 CEQA, PRC Section 21083.2, and CEQA Guidelines 15064.5

Includes provisions for significance criteria related to archaeological and historical resources. A significant archaeological or historical resource is defined as one that (a) meets the criteria of the CRHR, (b) is included in a local register of historical resources, (c) or is determined by the lead agency to be historically significant. A significant impact is characterized as a “substantial adverse change in the significance of a historical resource.” Public Resources Code (PRC) Section 5024.1 authorizes the establishment of the CRHR. Any identified cultural resources must therefore be evaluated against the CRHR criteria.

3.18.2.3 Local Regulations

3.18.2.3.1 Solano County General Plan

The following policies from the Solano County General Plan (Solano County 2008) are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Policy RS.P-38:** Identify and preserve important prehistoric and historic structures, features, and communities.

- **Policy RS.P-40:** Consult with Native American governments to identify and consider Native American cultural places in land use planning.

3.18.2.3.2 City of Dixon General Plan

The City of Dixon General Plan (City of Dixon 2021) contains goals that directly or indirectly pertain to Project cultural resources, including the following:

- **Urban Development & Community Design Goal 2:** To protect, preserve and enhance the significant historic features of the Dixon area to the maximum extent feasible.
- **Urban Development & Community Design Goal 4:** To preserve individual structures of historic value.

3.18.3 IMPACT ANALYSIS

V. Tribal Cultural RESOURCES Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size, or object with cultural value to the California Native American tribe and that is:		X		
b) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).		X		
c) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

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

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

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

Finding: Less than Significant with Mitigation

No known tribal cultural resources were identified at the project site or within 0.25 mile of the project site during the archival records search and literature review performed as part of the cultural resources inventory, and no Tribes have requested consultation regarding the proposed project. A field survey of the project area did not identify any archaeological tribal resources at the project site and noted that the project site has been disturbed by grading, construction, and tilling for vegetation management.

There are no known historic resources within the APE. However, the possibility for encountering buried historical resources during project construction can never be fully discounted. Therefore, Mitigation Measure CULTURAL-1 is required to reduce potential impacts on cultural resources to a less-than-significant level.

3.18.4 MITIGATION MEASURES

3.18.4.1 Mitigation Measure CULTURAL-1: Proper Handling of Inadvertent Discovery of Cultural and Paleontological Resources

If cultural resources are encountered during project construction, construction will cease immediately in the subject area and a qualified professional archaeologist will be consulted. Prehistoric resources may include chert or obsidian flakes, projectile points, mortars and pestles, dark friable soil containing shell and bone dietary debris, and heat-affected rock. Historic resources may include stone or wood foundations or walls, structures or remains with square nails, and refuse deposits.

If any paleontological resources (i.e., fossils) are found during project construction, construction will cease immediately in the subject area and the city will be immediately notified. A qualified paleontologist will be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resources. The appropriate treatment of inadvertently discovered paleontological resources will be implemented to ensure that the impacts to these resources are avoided.

3.18.4.2 Mitigation Measure CULTURAL-1 Implementation

- **Responsible Party:** The City of Dixon would ensure the appropriate treatment for any discovery of prehistoric, historic, or paleontological resources during construction.
- **Timing:** During all ground disturbing activities.
- **Monitoring and Reporting Program:** If any find is determined to be significant, representatives of the City of Dixon and a qualified archaeologist or paleontologist (if a paleontological resource is discovered) would meet to determine the appropriate avoidance measures or other appropriate

mitigation. All significant cultural materials and paleontological resources recovered will be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist or paleontologist (if a paleontological resource is discovered) according to current professional standards. A report will be kept on file at the City of Dixon.

- **Standards for Success:** The proper recording, evaluation, and treatment of any newly identified prehistoric, historic, or paleontological resources.

3.19 Utilities and Service Systems

3.19.1 ENVIRONMENTAL SETTING

3.19.1.1 Wastewater

The City of Dixon's City Engineering/Utilities Department provides all wastewater collection and treatment services for Dixon residents. In 2017, the City of Dixon upgraded its Wastewater Treatment Facility (WWTF) to comply with the Central Valley Regional Water Quality Control Board regulatory limits of salts in the treated effluent that reaches the groundwater, also known as discharge limits. The updated facility prevents discharge to open channels and creeks near the WWTF. The project also expanded the city's capacity to treat wastewater.

The City of Dixon completed the Sewer Collection System Master Plan in 2023 and it was adopted by the City on March 21, 2023 (reso 23-061). The general plan also contains policies and actions that ensure that Dixon would have adequate capacity to safely accommodate the wastewater needs of existing and future residents in the wastewater service area, including through ensuring compliance with state water treatment standards and by increasing the WWTF, trunk sewer, and pump capacities.

3.19.1.2 Water

Dixon's water currently comes exclusively from groundwater in the Solano subbasin of the Sacramento Valley Groundwater basin. The distribution system is served by two water service providers, the California Water Service Company and the City of Dixon.

3.19.1.3 Solid Waste

Solid waste is collected and disposed of by Recology, a private contractor under contract with the city. Solid waste generated in the City of Dixon is transported to the Recology Hay Road landfill, located in Vacaville.

3.19.1.4 Electricity, Natural Gas, Telecommunication

According to the Solano County General Plan (Solano County 2008), Solano County relies on multiple private companies for electricity, natural gas, and telecommunication services to provide redundancy and reliability. PG&E is the primary provider of natural gas and electric service to residents and businesses within Solano County. PG&E is regulated by the California Public Utilities Commission. Several independent companies provide telephone service to Solano County.

3.19.2 REGULATORY SETTING

3.19.2.1 Local Regulations

3.19.2.1.1 Solano County General Plan

The following policies from the Solano County General Plan (Solano County 2008) are referenced to support local policies and programs that may or may not be supported by the City of Dixon.

- **Policy PF.P-3:** Increase efficiency of water, wastewater, stormwater, and energy use through integrated and cost-effective design and technology standards for new development and redevelopment.
- **Policy PF.P-11:** Promote and model practices to improve the efficiency of water use, including the use of water-efficient landscaping, beneficial reuse of treated wastewater, rainwater harvesting, and water conserving appliances and plumbing fixtures.
- **Policy PF.P-21:** Sewer services for development within the unincorporated area may be provided through private individual on-site sewage disposal systems, or centralized community treatment systems managed by a public agency utilizing the best systems available that meet tertiary treatment or higher standards. Use of such centralized sewage treatment systems shall be limited to: (1) existing developed areas, (2) areas designated for commercial or development when part of a specific plan or policy plan overlay.
- **Policy PF.P-22**: Ensure that new and existing septic systems and sewage treatment systems do not negatively affect groundwater quality.

3.19.2.1.2 City of Dixon General Plan

- **Policy PSF-2.5** Use the performance metrics in the Water System Strategic Asset Management Plan adopted April 10, 2018 to identify and prioritize capital and maintenance improvement program elements.
- **Policy PSF-2.6** Provide wastewater collection and treatment services, ensuring that adequate capacity is available to serve existing and future need in the community and that effluent can be treated and disposed in accordance with RWQCB standards.

3.19.3 IMPACT ANALYSIS

XVIII. UTILITIES AND SERVICE SYSTEMS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or			X	

XVIII. UTILITIES AND SERVICE SYSTEMS Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Finding: Less than Significant

The Project involves improvements to the existing stormwater ditch along the entrance road to the WWTF. These improvements would allow better maintenance of the stormwater ditch and would not cause significant environmental effects.

Therefore, impacts to storm water facilities are considered less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Finding: Less than Significant

The Project is intended to increase water efficiency at the WWTF. Therefore impacts would be less than significant

c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Finding: Less than Significant

The Project involves improvements to the existing City of Dixon WWTF. This Project is necessary for the WWTF to accommodate the levels of public services that were studied within the City of Dixon General Plan (City of Dixon 2021). CEQA review was conducted on the existing levels of development within the City of Dixon General Plan and the CEQA findings were circulated for public input and adopted by the City. Therefore, the Project would not increase the demand for wastewater treatment services in the area and impacts are considered less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Finding: Less than Significant

Construction would generate solid waste associated with construction materials, excavation spoils, vegetation removal, and general refuse. Any material that cannot be used as fill material would be disposed of at a local landfill. The closest landfill to the project area is the Hay Road landfill, located at 6426 Hay Road, Vacaville. Negligible volumes of debris and waste would be generated during project construction and it would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs. The Project would not generate additional waste once operational. As such, impacts related to solid waste disposal would be less than significant.

e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?

Finding: Less than Significant

The California Integrated Waste Management Act requires every county to adopt an Integrated Waste Management Plan that describes county objectives, policies, and programs relative to waste disposal, management, source reduction, and recycling. The removal of solid waste due to construction activities would comply with all federal, state, and local statutes and regulations. Impacts to solid waste statutes and regulations would be less than significant.

3.20 Wildfire

3.20.1 ENVIRONMENTAL SETTING

The State of California and Solano County FHSZ maps are based on an evaluation of fire history, existing and potential fuel, flame length, blowing embers, terrain, weather, and the likelihood of buildings igniting. Fire hazard is a way to measure physical fire behavior so that people can predict the damage a fire is likely to cause. CAL FIRE maintains FHSZ maps for Local Responsibility Areas and State Responsibility Areas (SRA). The CAL FIRE severity scale defined in the Regulatory Framework below considers vegetation, climate, and slope to evaluate the level of wildfire hazard in a SRA. CAL FIRE designated three levels of fire hazard severity zones (Moderate, High, and Very High) to indicate the severity of fire hazard in a particular geographic or SRA. The project area is considered a local responsibility areas and is not located within the SRA and does not fall under the Federal Responsibility Area (CAL FIRE 2023).

Dixon chronically experiences drought cycles. Major droughts affecting Solano County occurred 1896 to 1900, 1975 to 1977, 1991, 2004, 2006 to 2009, 2011 to 2016, and 2022. Droughts are a normal part of the climate cycle, but they may cause losses to agriculture; affect domestic water supply, energy production, public health, and wildlife; and contribute to wildfire. The land surrounding the Project is primarily cultivated agriculture land, which provides protection from wildfire risk. During the development of this document, the county is in the process of updating and finalizing the Solano County 2023 Community Wildfire Protection Plan.

3.20.2 REGULATORY SETTING

3.20.2.1 Federal Regulations

CFR Title 36, Chapter II, Part 261 discusses actions that are prohibited and could result in fire damages to federal lands. These include (a) carelessly or negligently throwing or placing any ignited substance or other substance that may cause a fire, (b) firing any tracer bullet or incendiary ammunition; (c) causing timber, trees, slash, brush, or grass to burn except as authorized by permit; (d) leaving fire without completely extinguishing it; (e) causing and failing to maintain control of a fire that is not a prescribed fire that damages forest lands; (f) building, attending, maintaining, or using a campfire without removing all flammable material from around the campfire adequate to prevent its escape; and (g) negligently failing to maintain control of a prescribed fire on federal lands that damages the land.

3.20.2.1.1 Executive Order 13855

Executive Order 13855 promotes active management of U.S.'s forests, rangelands, and other federal lands to improve conditions and reduce wildfire risk. The Executive Order emphasizes that federal agencies must collaborate with state and local institutions and incorporate active management principles into all land management planning efforts in order to address the challenges of wildland fire.

3.20.2.1.2 Secretary Order 3374 – Implementation of the John D. Dingell, Jr. Conservation, Management, and Recreation Act

Secretarial Order 3374 established a Department of the Interior task force to facilitate the Implementation of the Dingell Act, which was established on March 12, 2019. The Dingell Act lays out provisions for various programs and activities affecting the management and conservation of natural resources on federal lands, to include wildland fire operations.

3.20.2.2 State Regulations

3.20.2.2.1 Fire Protection

California fire safety regulations apply to SRAs during the time of year designated as having hazardous fire conditions. CAL FIRE has developed a fire hazard severity scale that considers vegetation, climate, and slope to evaluate the level of wildfire hazard in all SRAs. An SRA is defined as the part of the state where CAL FIRE is primarily responsible for providing basic wildland fire protection assistance. Areas

under the jurisdiction of other fire protection services are considered to be Local Responsibility Areas or on federal lands are considered Federal Responsibility Areas.

During the fire hazard season, these regulations include: (1) restricting the use of equipment that may produce a spark, flame, or fire; (2) requiring the use of spark arrestors on any equipment that has an internal combustion engine; (3) specifying requirements for the safe use of gasoline-powered tools in fire hazard areas; and (4) specifying fire suppression equipment that must be provided on-site for various types of work in fire-prone areas. CAL FIRE has primary responsibility for fire protection within SRAs.

3.20.2.2.2 California Code of Regulations

The CCR Title 14, Division 1.5, Chapter 7, Subchapter 2 includes SRA fire-safe regulations. These regulations establish minimum wildfire protection standards in conjunction with building, construction, and development within an SRA. These regulations provide for emergency access, signing and building numbering, private water supply reserves for emergency fire use, and vegetation modification. Because the Project is located within an SRA, the CCR SRA fire-safe regulations apply to the Project (State of California 2020).

3.20.2.3 Local Regulations

3.20.2.3.1 Solano County General Plan

The following goal and policies from the Solano County General Plan (Solano County 2008) are referenced to support local policies and programs that may or may not be supported by the City of Dixon:

- **Policy RS.P-69:** Preserve and maintain watershed areas characterized by slope instability, undevelopable steep slopes, high soil erosion potential, and extreme fire hazards in agricultural use. Watershed areas lacking water and public services should also be kept in agricultural use.
- **Policy HS.P-20:** Require that structures be built in fire defensible spaces and minimize the construction of public facilities in areas of high or very high wildfire risk.
- **Policy HS.P-21:** Prohibit non-farm-related development and road construction for public use in areas of extreme wildfire risk.
- **Policy HS.P-22:** Require new developments in areas of high and very high wildfire risk to incorporate fire-safe building methods and site planning techniques into the development.
- **Policy HS.P-23:** Work with fire districts including the Sonoma-Lake-Napa Fire Unit, other agencies and property owners to ensure consistency with related plans including the Unit Fire Plan and the Solano County Emergency Operations Plan, and to coordinate efforts to prevent wildfires and grassfires through fire protection measures such as consolidation of efforts to abate fuel buildup, access to firefighting equipment, and provision of water service.
- **Policy HS.I-26:** Work with fire districts to ensure that new development is built to support effective firefighting. Continue to seek fire district input on new development projects and ensure

that such projects incorporate fire-safe planning and building measures. Such measures may include clustering housing, buffering properties, creating defensible space around individual units, using fire-resistant building materials, installing sprinkler systems, and providing adequate on-site water supplies.

3.20.2.3.2 City of Dixon General Plan

- **Policy NE-4.11**: Evaluate proximity to fire hazard and wildland-urban interface areas and feasibility of maintaining defensible space as part of the development review process.
- **Policy NE-4.12:** Ensure adequate firefighting infrastructure, including water supply and pressure, road and building clearance for firefighting vehicles, and clear and legible street signage throughout the community.
- **Policy NE-4.13:** Place all new public facilities outside of identified fire hazard risk areas, as feasible. Appropriately retrofit or, if necessary, relocate existing public facilities outside of identified fire hazard areas.
- **Policy NE-4.14:** Encourage the retrofitting of older buildings to current safety standards in coordination with proposed major remodeling or additions.

3.20.2.3.3 Community Wildfire Protection Plan

During the development of this document, the county is in the process of updating and finalizing the Solano County 2023 Community Wildfire Protection Plan.

3.20.3 IMPACT ANALYSIS

XIX. WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

a) *Would* the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Finding: No Impact

The activities associated with the Project would not result in any permanent changes that would impair an adopted emergency response plan or emergency evacuation plan, as they would not create a long-term increase in traffic, block any roadways, or increase any urban uses. Therefore, the Project would result in a less-than-significant impact.

b) Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Finding: No Impact

The project site is located within an area that does not have a FHSZ rating due to the low wildfire potential. The Project does not include any permanent above-ground features that would house people that could be exposed to pollutant concentrations from a wildfire or uncontrolled spread of wildfire. Therefore, there would be no permanent impacts.

During construction, the Project would require use of construction equipment and materials in the summer months near vegetated areas, which could increase the risk of wildfires created by sparks from the equipment. However, the Project is located in a low-risk wildfire area and construction would generally be

located within previously disturbed areas. Therefore, impacts would be less than significant with mitigation.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Finding: Less than significant

The Project would not require any features that would exacerbate fire risk or result in ongoing impacts to the environment. The proposed infrastructure would be within the existing WWTF footprint and would have no operational impacts related to exacerbated fire risk. Therefore, the Project would have a less-than-significant impact related to increased risk due to installation or maintenance of associated infrastructure.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Finding: Less than significant

The Project is located in low wildfire fire severity area and construction activities would be confined to the WWTF existing footprint and generally in previously disturbed areas. Therefore, the Project would result in a less-than-significant impacts during construction.

Operations at the WWTF would be similar to the existing operations and would not change the slope or drainage of the area. Therefore, impacts would be less than significant.

3.21 Mandatory Findings of Significance

3.21.1 IMPACT ANALYSIS

XX. MANDATORY FINDINGS OF SIGNIFICANCE Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		

XX. MANDATORY FINDINGS OF SIGNIFICANCE Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less-than-Significant Impact	No Impact
b) Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?			X	
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

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

Finding: Less than Significant with Mitigation

As disclosed in Section 3.4, Biological Resources of this document, biological resources on the site that could be affected by the Project include a low potential for alkali milk-vetch and adobe lily and potential nesting habitat for raptors and other migratory birds. Drainages with wetland vegetation do occur along Casey Road along the edge of the existing irrigation area and along the western edge of the treatment area and a drainage/irrigation ditch runs along Pedrick Road outside of the Dixon WWTF to the east. However, none of these drainages with wetland vegetation would be directly impacted by the proposed improvements at the Dixon WWTF.

Recommended avoidance and minimization mitigation, such as contractor environmental awareness training, protocol-level botanical surveys prior to construction, exclusion fencing installation for environmentally sensitive areas, avoiding disturbance of nesting raptors and other migratory birds during construction activities, sedimentation, and erosion control measures, avoiding and compensating site wetlands to ensure all potential impacts are mitigated to less-than-significant levels.

The Project would not substantially reduce fish habitat or wildlife species density. In addition, the Project would not substantially reduce wildlife habitat or species. Sediment control measures would be taken to minimize impacts to surrounding waterways and drainages. The majority of this Project's proposed new infrastructure is located within areas that have been previously disturbed.

The Project would not cause a fish or wildlife species population to drop below self-sustaining levels or threaten to eliminate a rare or endangered plant or animal because the Project is not expected to significantly impact any locally, state, or federally rare and endangered species (Table 3.4-1). No state or federally listed rare or endangered plants were identified during site surveys. Therefore, the Project would not cause a population to drop below self-sustaining levels.

As indicated in Section 3.5, Cultural Resources of this document, a full accounting of all potential cultural resources located within the APE was achieved through a records search, Native American consultation, and archaeological survey. The survey confirmed that the ground surface within the APE has been previously disturbed and developed. There is always the possibility, that subsurface archaeological deposits may exist in the APE, as archaeological sites may be buried with no surface manifestation. As discussed in Mitigation Measures CULTURAL-1 and CULTURAL-2, if any cultural resources, paleontological resources, or human remains are encountered during construction, all construction activities would cease and a professional archaeologist or the County Coroner would be consulted.

b) Does the Project have impacts that are individually limited, but cumulative considerable? ("Cumulative 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)?

Finding: Less than Significant

There are a number of projects anticipated for ongoing and future developments within the city. The following projects are currently under planning application review:

1. Dison Innovation Center Pre App for 600,000 square feet Light Industrial/Tech in NEQ (Pedrick Rd)
2. Dixon 257 /The Campus-Mixed use with 650,000 square feet Research and Development/tech, 800-1,000 Residential units, 2 acres commercial on 257 acres in NEQ (Pedrick Rd).
3. Milk Farm -Travel center, redo of Restaurant, retail, hotel, truck services (N 1-80 off Curry Rd) - ON HOLD.
4. Lombardo/Brookfield -Pre-Application for residential subdivision/annexation - ON HOLD.
5. Market Place Housing-Pre-Application for affordable housing and small commercial.

The following projects have been approved, but have not been issued a building permit:

1. Dual Brand Hotel -150 room and Drive Thru pad (Dorsett Dr). Approved by City Council May 16, 2023.
2. independence at Dixon -100 residential units approved, requesting 186 duplex units (N 1st Street/Lincoln Street).
3. Dixon Commerce Center -125,000 square feet warehouse expansion (2299 Commerce Way). Approved June 21, 2022.
4. Dixon Residential Care Facility Center -25,000 square feet senior care facility (N 1st Street/Lincoln Ave).
5. Whiskey Barrel -Pub/lounge in vacant building (171N1st Street) Approved April 18, 2023.

6. Plaza Center Expansion -New 2l,000 square feet, three retail buildings addition (End of Plaza Court).

The current and future WWTF operations are not expected to have impacts that are individually limited, nor cumulatively considerable, when also considering the effects of another Project, beyond that already evaluated in the general plan. The Project, treatment capacity is designed to accommodate the levels of public services that were studied within the updated general plan (City of Dixon 2021). CEQA environmental review was previously conducted on growth forecasts and related growth inducing impacts from the Project when the general plan was adopted by the city in 2021, and more recently when the Housing Element was adopted in 2023. Environmental impact thresholds of significance for the Project rely on previous CEQA findings of the general plan and related general plan Housing Element Update which were previously circulated for public input and also adopted by the city. Therefore, the Project would not contribute to significant cumulative indirect growth impacts in the region over that previously disclosed and/or studied in the city's General Plan and impacts are considered less than significant.

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

Finding: Less than Significant

project construction and operation would not include uses, which would result in substantial adverse effects on human beings. All impacts are considered either less than significant with mitigation, less than significant, or no impacts would occur. Mitigation Measures and Environmental Commitments described in the document sections referenced above would be incorporated by the City of Dixon and would ensure all potential effects on human beings are less than significant. Therefore, the Project would not have environmental effects with substantial adverse direct or indirect effects on human beings.

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Appendix A Air Quality and Greenhouse Gas Modeling Results

Dixon WWTF Expansion Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Dixon WWTF Expansion
Construction Start Date	1/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	34.8
Location	38.39818699874061, -121.81036435584218
County	Solano-Sacramento
City	Dixon
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	829
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Unrefrigerated Warehouse-No Rail	3.80	1000sqft	2.50	3,800	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.01	2.33	18.9	15.9	0.06	0.74	17.5	18.2	0.68	4.47	5.16	—	8,051	8,051	0.16	0.84	11.1	8,318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	2.33	19.4	16.7	0.06	0.68	29.4	30.1	0.63	3.01	3.64	—	8,049	8,049	0.16	0.84	0.29	8,304
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.18	0.97	9.59	9.01	0.02	0.37	4.64	5.02	0.34	0.56	0.90	—	2,587	2,587	0.08	0.16	0.85	2,636
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21	0.18	1.75	1.65	< 0.005	0.07	0.85	0.92	0.06	0.10	0.16	—	428	428	0.01	0.03	0.14	436

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.01	1.69	18.9	15.9	0.06	0.74	17.5	18.2	0.68	4.47	5.16	—	8,051	8,051	0.16	0.84	11.1	8,318
2025	0.16	2.33	0.88	1.15	< 0.005	0.03	0.33	0.36	0.03	0.03	0.06	—	136	136	0.01	< 0.005	0.01	137
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.99	1.67	19.4	16.7	0.06	0.68	29.4	30.1	0.63	3.01	3.64	—	8,049	8,049	0.16	0.84	0.29	8,304
2025	1.49	2.33	10.6	11.9	0.02	0.40	2.13	2.53	0.37	0.21	0.59	—	2,231	2,231	0.09	0.02	< 0.005	2,240
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.18	0.97	9.59	9.01	0.02	0.37	4.64	5.02	0.34	0.56	0.90	—	2,587	2,587	0.08	0.16	0.85	2,636
2025	0.23	0.25	1.63	1.83	< 0.005	0.06	0.30	0.36	0.06	0.03	0.09	—	340	340	0.01	< 0.005	0.01	341
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.21	0.18	1.75	1.65	< 0.005	0.07	0.85	0.92	0.06	0.10	0.16	—	428	428	0.01	0.03	0.14	436
2025	0.04	0.05	0.30	0.33	< 0.005	0.01	0.05	0.07	0.01	0.01	0.02	—	56.3	56.3	< 0.005	< 0.005	< 0.005	56.5

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.15	0.04	0.41	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	3.61	718	722	0.47	0.02	0.21	740
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.12	0.04	0.23	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	3.61	714	717	0.47	0.02	0.01	735

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.13	0.04	0.30	< 0.005	< 0.005	2.64	2.64	< 0.005	0.27	0.27	3.61	715	718	0.47	0.02	0.09	736
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.02	0.01	0.05	< 0.005	< 0.005	0.48	0.48	< 0.005	0.05	0.05	0.60	118	119	0.08	< 0.005	0.02	122

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.03	0.24	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	—	56.8	56.8	< 0.005	< 0.005	0.21	57.8
Area	0.03	0.11	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	659	659	0.11	0.01	—	666
Water	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Total	0.06	0.15	0.04	0.41	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	3.61	718	722	0.47	0.02	0.21	740
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.03	0.22	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	—	52.8	52.8	< 0.005	< 0.005	0.01	53.7
Area	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	659	659	0.11	0.01	—	666
Water	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Total	0.03	0.12	0.04	0.23	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	3.61	714	717	0.47	0.02	0.01	735

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.03	0.21	< 0.005	< 0.005	2.64	2.64	< 0.005	0.27	0.27	—	53.5	53.5	< 0.005	< 0.005	0.09	54.5
Area	0.01	0.10	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.34	0.34	< 0.005	< 0.005	—	0.34
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	659	659	0.11	0.01	—	666
Water	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Waste	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Total	0.05	0.13	0.04	0.30	< 0.005	< 0.005	2.64	2.64	< 0.005	0.27	0.27	3.61	715	718	0.47	0.02	0.09	736
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.04	< 0.005	< 0.005	0.48	0.48	< 0.005	0.05	0.05	—	8.86	8.86	< 0.005	< 0.005	0.02	9.02
Area	< 0.005	0.02	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	109	109	0.02	< 0.005	—	110
Water	—	—	—	—	—	—	—	—	—	—	—	0.28	0.25	0.53	0.03	< 0.005	—	1.45
Waste	—	—	—	—	—	—	—	—	—	—	—	0.32	0.00	0.32	0.03	0.00	—	1.12
Total	0.01	0.02	0.01	0.05	< 0.005	< 0.005	0.48	0.48	< 0.005	0.05	0.05	0.60	118	119	0.08	< 0.005	0.02	122

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.76	0.76	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.88	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.48	0.00	0.00	13.0	13.0	0.00	1.31	1.31	—	104	104	< 0.005	< 0.005	0.01	105
Vendor	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	0.00
Hauling	0.02	0.01	0.78	0.17	< 0.005	0.01	15.6	15.6	0.01	1.58	1.60	—	615	615	0.01	0.10	0.03	644
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.65	0.65	0.00	0.07	0.07	—	5.80	5.80	< 0.005	< 0.005	0.01	5.89
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.77	0.78	< 0.005	0.08	0.08	—	33.7	33.7	< 0.005	0.01	0.03	35.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.12	0.12	0.00	0.01	0.01	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.97
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.14	0.14	< 0.005	0.01	0.01	—	5.58	5.58	< 0.005	< 0.005	< 0.005	5.84

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	1.63	1.63	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	12.7	11.4	0.03	0.55	—	0.55	0.51	—	0.51	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	1.63	1.63	—	0.18	0.18	—	—	—	—	—	—	—

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.21	2.08	1.88	< 0.005	0.09	—	0.09	0.08	—	0.08	—	446	446	0.02	< 0.005	—	448
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	73.9	73.9	< 0.005	< 0.005	—	74.2
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	7.81	7.81	0.00	0.79	0.79	—	68.9	68.9	< 0.005	< 0.005	0.28	70.0
Vendor	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	0.00
Hauling	0.19	0.10	6.22	1.47	0.03	0.10	1.39	1.49	0.10	0.38	0.48	—	5,267	5,267	0.05	0.82	10.8	5,522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.29	0.00	0.00	7.81	7.81	0.00	0.79	0.79	—	62.3	62.3	< 0.005	< 0.005	0.01	63.1
Vendor	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	0.00

Hauling	0.18	0.09	6.71	1.50	0.03	0.10	1.39	1.49	0.10	0.38	0.48	—	5,271	5,271	0.05	0.82	0.28	5,516
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.05	0.00	0.00	1.16	1.16	0.00	0.12	0.12	—	10.4	10.4	< 0.005	< 0.005	0.02	10.6
Vendor	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	0.00
Hauling	0.03	0.02	1.08	0.24	0.01	0.02	0.22	0.24	0.02	0.06	0.08	—	866	866	0.01	0.13	0.76	907
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.21	0.21	0.00	0.02	0.02	—	1.73	1.73	< 0.005	< 0.005	< 0.005	1.75
Vendor	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	0.00
Hauling	0.01	< 0.005	0.20	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	143	143	< 0.005	0.02	0.13	150

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.03	0.26	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.3	40.3	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.46	0.00	0.00	10.4	10.4	0.00	1.05	1.05	—	91.9	91.9	< 0.005	< 0.005	0.38	93.4
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.15	0.15	0.00	0.02	0.02	—	1.39	1.39	< 0.005	< 0.005	< 0.005	1.41
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.03	0.03	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.23
Vendor	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	0.00
Hauling	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	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.58	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.58	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.59	5.08	5.40	0.01	0.21	—	0.21	0.19	—	0.19	—	995	995	0.04	0.01	—	998
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.93	0.98	< 0.005	0.04	—	0.04	0.03	—	0.03	—	165	165	0.01	< 0.005	—	165

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	1.66	1.66	0.00	0.17	0.17	—	14.7	14.7	< 0.005	< 0.005	0.06	14.9
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	17.4	17.4	< 0.005	< 0.005	0.04	18.2
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	1.66	1.66	0.00	0.17	0.17	—	13.3	13.3	< 0.005	< 0.005	< 0.005	13.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	17.4	17.4	< 0.005	< 0.005	< 0.005	18.1
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.68	0.68	0.00	0.07	0.07	—	6.11	6.11	< 0.005	< 0.005	0.01	6.20
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	7.88	7.88	< 0.005	< 0.005	0.01	8.21
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.12	0.12	0.00	0.01	0.01	—	1.01	1.01	< 0.005	< 0.005	< 0.005	1.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.36
Hauling	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	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.24	10.6	11.9	0.02	0.40	—	0.40	0.37	—	0.37	—	2,201	2,201	0.09	0.02	—	2,209
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.60	1.79	< 0.005	0.06	—	0.06	0.06	—	0.06	—	332	332	0.01	< 0.005	—	333
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.9	54.9	< 0.005	< 0.005	—	55.1
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	1.66	1.66	0.00	0.17	0.17	—	13.0	13.0	< 0.005	< 0.005	< 0.005	13.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	17.1	17.1	< 0.005	< 0.005	< 0.005	17.8
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.23	0.23	0.00	0.02	0.02	—	2.00	2.00	< 0.005	< 0.005	< 0.005	2.03
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.01	—	2.58	2.58	< 0.005	< 0.005	< 0.005	2.69
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.04	0.04	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.45
Hauling	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	0.00

3.11. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	0.75	6.44	8.26	0.01	0.31	—	0.31	0.29	—	0.29	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.1	34.1	< 0.005	< 0.005	—	34.2
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64	5.64	< 0.005	< 0.005	—	5.66
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.69	0.00	0.00	15.6	15.6	0.00	1.57	1.57	—	138	138	< 0.005	0.01	0.56	140
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.39	0.39	0.00	0.04	0.04	—	3.48	3.48	< 0.005	< 0.005	0.01	3.53
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.07	0.07	0.00	0.01	0.01	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.58
Vendor	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	0.00
Hauling	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	0.00

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	2.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	2.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.33	0.33	0.00	0.03	0.03	—	2.88	2.88	< 0.005	< 0.005	0.01	2.92
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.33	0.33	0.00	0.03	0.03	—	2.60	2.60	< 0.005	< 0.005	< 0.005	2.63
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.03	0.03	0.24	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	—	56.8	56.8	< 0.005	< 0.005	0.21	57.8
Total	0.03	0.03	0.03	0.24	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	—	56.8	56.8	< 0.005	< 0.005	0.21	57.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.03	0.03	0.03	0.22	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	—	52.8	52.8	< 0.005	< 0.005	0.01	53.7
Total	0.03	0.03	0.03	0.22	< 0.005	< 0.005	2.92	2.92	< 0.005	0.30	0.30	—	52.8	52.8	< 0.005	< 0.005	0.01	53.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.01	0.01	0.01	0.04	< 0.005	< 0.005	0.48	0.48	< 0.005	0.05	0.05	—	8.86	8.86	< 0.005	< 0.005	0.02	9.02
Total	0.01	0.01	0.01	0.04	< 0.005	< 0.005	0.48	0.48	< 0.005	0.05	0.05	—	8.86	8.86	< 0.005	< 0.005	0.02	9.02

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	653	653	0.11	0.01	—	659
Total	—	—	—	—	—	—	—	—	—	—	—	—	653	653	0.11	0.01	—	659
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	653	653	0.11	0.01	—	659
Total	—	—	—	—	—	—	—	—	—	—	—	—	653	653	0.11	0.01	—	659
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	108	108	0.02	< 0.005	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	—	108	108	0.02	< 0.005	—	109

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrige Warehouse-No Rail	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.78
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.78
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.76	6.76	< 0.005	< 0.005	—	6.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrige rated Warehou se-No Rail	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.12
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.12	1.12	< 0.005	< 0.005	—	1.12

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Total	0.03	0.11	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Total	< 0.005	0.02	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Total	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Total	—	—	—	—	—	—	—	—	—	—	—	1.68	1.54	3.22	0.17	< 0.005	—	8.78
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.28	0.25	0.53	0.03	< 0.005	—	1.45
Total	—	—	—	—	—	—	—	—	—	—	—	0.28	0.25	0.53	0.03	< 0.005	—	1.45

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Total	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Total	—	—	—	—	—	—	—	—	—	—	—	1.93	0.00	1.93	0.19	0.00	—	6.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.32	0.00	0.32	0.03	0.00	—	1.12
Total	—	—	—	—	—	—	—	—	—	—	—	0.32	0.00	0.32	0.03	0.00	—	1.12

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2024	1/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	1/30/2024	4/22/2024	5.00	60.0	—
Grading	Grading	4/23/2024	4/30/2024	5.00	6.00	—
Building Construction	Building Construction	5/15/2024	3/18/2025	5.00	220	—
Paving	Paving	5/1/2024	5/14/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	3/19/2025	4/1/2025	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	8.75	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	75.0	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1.60	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	0.62	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.32	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	5,700	1,900	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	700	—
Site Preparation	26,000	10,000	4.50	0.00	—
Grading	—	—	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	6.61	6.61	6.61	2,413	64.4	64.4	64.4	23,493

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	5,700	1,900	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	1,167,843	204	0.0330	0.0040	21,108

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	878,750	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	3.57	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.5	annual days of extreme heat
Extreme Precipitation	3.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	14.2	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	37.8
AQ-PM	17.2
AQ-DPM	18.0
Drinking Water	76.4
Lead Risk Housing	40.2
Pesticides	86.4
Toxic Releases	28.4
Traffic	44.1
Effect Indicators	—
CleanUp Sites	89.1
Groundwater	99.1
Haz Waste Facilities/Generators	95.5
Impaired Water Bodies	91.9
Solid Waste	99.6
Sensitive Population	—
Asthma	57.3
Cardio-vascular	44.1

Low Birth Weights	0.68
Socioeconomic Factor Indicators	—
Education	77.1
Housing	2.62
Linguistic	62.2
Poverty	26.4
Unemployment	23.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	42.46118311
Employed	79.36609778
Median HI	62.96676505
Education	—
Bachelor's or higher	43.46208136
High school enrollment	25.6255614
Preschool enrollment	77.6337739
Transportation	—
Auto Access	69.12613884
Active commuting	79.81521879
Social	—
2-parent households	79.32760169
Voting	67.7659438
Neighborhood	—
Alcohol availability	88.83613499

Park access	6.685486975
Retail density	1.860644168
Supermarket access	17.91351213
Tree canopy	32.40087258
Housing	—
Homeownership	45.79751059
Housing habitability	63.40305402
Low-inc homeowner severe housing cost burden	15.23161812
Low-inc renter severe housing cost burden	95.45746182
Uncrowded housing	34.55665341
Health Outcomes	—
Insured adults	48.58206082
Arthritis	0.0
Asthma ER Admissions	49.0
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	70.1
Cognitively Disabled	52.2
Physically Disabled	76.0
Heart Attack ER Admissions	60.6
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0

Pedestrian Injuries	94.5
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	45.9
Elderly	35.4
English Speaking	44.6
Foreign-born	29.3
Outdoor Workers	3.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	98.9
Traffic Density	46.8
Traffic Access	23.0
Other Indices	—
Hardship	46.6
Other Decision Support	—
2016 Voting	69.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0

Healthy Places Index Score for Project Location (b)	65.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Warehouse land use used to represent new maintenance building and new pump station structure.
Construction: Off-Road Equipment	Construction equipment assumptions applied for linear project.
Operations: Energy Use	Annual electricity consumption increased to account for new electrical equipment.
Construction: On-Road Fugitive Dust	All area roadways are paved.
Construction: Construction Phases	Site prep extended to account for material import/export.
Construction: Dust From Material Movement	Material import/export required per applicant-provided information.

Appendix B Energy Calculations

Dixon WWTF Improvement Project—Energy Consumption Summary

Date of Last Revision: October 23, 2023

Summary of Energy Use During Construction		(Annually)
Construction vehicle fuel	32,654	gallons (gasoline, diesel)
Construction equipment fuel	21,704	gallons (diesel)

Summary of Energy Use During Proposed Operations		(Annually)
Operational vehicle fuel consumption	1,083	gallons (gasoline, diesel)
Operational electricity consumption	1,128,191	kilowatt hours

Construction Vehicle Fuel Calculations (Page 1 of 2)

California Air Resource Board (CARB). 2023. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory/. Accessed October 16, 2023.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Solano
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

						Given			*Calculations*	
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT (mi/day)	Fuel Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
Solano	2024	HHDT	Aggregate	Aggregate	Gasoline	0.764655	48.88088	0.013986877	3.494767586	170.8273
Solano	2024	HHDT	Aggregate	Aggregate	Diesel	4627.7722	689969.8	114.2470026	6.039281672	4166922
Solano	2024	LDA	Aggregate	Aggregate	Gasoline	156883.98	6604203	223.5700755	29.5397437	1.95E+08
Solano	2024	LDA	Aggregate	Aggregate	Diesel	519.82391	17175.99	0.407836504	42.11489773	723365.2
Solano	2024	LDT1	Aggregate	Aggregate	Gasoline	14805.593	510875.5	20.67319846	24.71197143	12624741
Solano	2024	LDT1	Aggregate	Aggregate	Diesel	5.2210937	49.97687	0.002050294	24.37546278	1218.209
Solano	2024	LDT2	Aggregate	Aggregate	Gasoline	64304.323	2615535	109.3866289	23.91092365	62539866
Solano	2024	LDT2	Aggregate	Aggregate	Diesel	211.84007	9217.287	0.286856773	32.13201771	296170
Solano	2024	LHDT1	Aggregate	Aggregate	Gasoline	6026.789	232970.9	24.54334469	9.492223016	2211412
Solano	2024	LHDT1	Aggregate	Aggregate	Diesel	5198.9274	196093.3	12.37409461	15.84708521	3107508
Solano	2024	LHDT2	Aggregate	Aggregate	Gasoline	735.82948	28538.81	3.338249221	8.549034948	243979.3
Solano	2024	LHDT2	Aggregate	Aggregate	Diesel	1980.445	78927.53	6.073799205	12.99475469	1025644
Solano	2024	MDV	Aggregate	Aggregate	Gasoline	47796.127	1783895	91.51120002	19.49373717	34774786
Solano	2024	MDV	Aggregate	Aggregate	Diesel	729.74548	29457.53	1.226211986	24.02319499	707664
Solano	2024	MHDT	Aggregate	Aggregate	Gasoline	371.83014	23429.59	4.939197182	4.743602327	111140.6
Solano	2024	MHDT	Aggregate	Aggregate	Diesel	2694.3673	113489.5	13.4294305	8.450802131	959077

Worker

Sum of VMT*FE (Column BI)	**3.07E+08**
Total VMT	**11570410**
Weighted Average Fuel Economy	**26.51196**

Vendor

Sum of VMT*FE (Column BI)	**11825853**
Total VMT	**1363468**
Weighted Average Fuel Economy	**8.673361**

Haul

Sum of VMT*FE (Column BI)	**4167093**
Total VMT	**690018.7**
Weighted Average Fuel Economy	**6.039101**

Construction Vehicle Fuel Calculations (Page 2 of 2)

Construction Schedule

Source: CalEEMod Output

Dixon WWTF Improvements Project

CalEEMod Phase Type	Phase Name	Start Date	End Date	Num Days Week	Num Days
Demolition	Demolition	1/1/2024	1/29/2024	5	20
Site Preparation	Site Preparation	1/30/2024	4/22/2024	5	60
Grading	Grading	4/23/2024	4/30/2024	5	6
Building Construction	Building Constructi	5/15/2024	3/18/2025	5	220
Paving	Paving	5/1/2024	5/14/2024	5	10
Architectural Coating	Architectural Coatir	3/19/2025	4/1/2025	5	10

Construction Trips and VMT

	Trips per Day			Construction Trip Length in Miles			Number of Days per Phase	Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Demolition	26	0	18	11.7	8.4	20	20	520	0	360	6,084	0	7,200	229.48	0.00	1,192.23
Site Preparation	16	0	150	11.7	8.4	20	60	960	0	9,000	11,232	0	180,000	423.66	0.00	29,805.76
Grading	20	0	0	11.7	8.4	20	6	120	0	0	1,404	0	0	52.96	0.00	0.00
Building Construction	4	2	0	11.7	8.4	20	220	880	440	0	10,296	3,696	0	388.35	426.13	0.00
Paving	30	0	0	11.7	8.4	20	10	300	0	0	3,510	0	0	132.39	0.00	0.00
Architectural Coating	1	0	0	11.7	8.4	20	10	6	0	0	75	0	0	2.82	0.00	0.00
											32,601	3,696	187,200	1,230	426	30,998

Total Project Construction VMT (miles)

223,497

Total Project Fuel Consumption (gallons)

32,654

Construction Equipment Fuel Calculation

Dixon WWTF Improvements Project

Construction Schedule

CalEEMod Phase Type	Phase Name	Start Date	End Date	Num Days/ Week	Num Days
Demolition	Demolition	1/1/2024	1/29/2024	5	20
Site Preparation	Site Preparation	1/30/2024	2/3/2024	5	3
Grading	Grading	2/4/2024	2/12/2024	5	6
Building Construction	Building Construction	2/13/2024	12/17/2024	5	220
Paving	Paving	12/18/2024	1/1/2025	5	10
Architectural Coating	Architectural Coating	1/2/2025	1/16/2025	5	10

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	HP Bin	Equipment Type + HP	Fuel (gallons/HP-hour)	Diesel Fuel Usage
Demolition	Concrete/Industrial Saws	1	8	33	0.73	20	3,854.40	50	Concrete/Industrial Saws 50	0.04190845	161.53
Demolition	Rubber Tired Dozers	1	8	367	0.4	20	23,488.00	600	Rubber Tired Dozers 600	0.04481708	1,052.66
Demolition	Tractors/Loaders/Backhoes	3	8	84	0.37	20	14,918.40	100	Tractors/Loaders/Backhoes 100	0.05650435	842.95
Site Preparation	Tractors/Loaders/Backhoes	1	7	84	0.37	3	652.68	100	Tractors/Loaders/Backhoes 100	0.05650435	36.88
Site Preparation	Graders	1	8	148	0.41	3	1,456.32	175	Graders 175	0.05402787	78.68
Site Preparation	Scrapers	1	8	423	0.48	3	4,872.96	600	Scrapers 600	0.04726234	230.31
Grading	Graders	1	8	148	0.41	6	2,912.64	175	Graders 175	0.05402787	157.36
Grading	Rubber Tired Dozers	1	8	367	0.4	6	7,046.40	600	Rubber Tired Dozers 600	0.04481708	315.80
Grading	Tractors/Loaders/Backhoes	2	7	84	0.37	6	2,610.72	100	Tractors/Loaders/Backhoes 100	0.05650435	147.52
Building Construction	Cranes	1	8	367	0.29	220	187,316.80	600	Cranes 600	0.05173333	9,690.52
Building Construction	Forklifts	2	7	82	0.2	220	50,512.00	100	Forklifts 100	0.05795440	2,927.39
Building Construction	Generator Sets	1	8	14	0.74	220	18,233.60	15	Generator Sets 15	0.01758493	320.64
Building Construction	Tractors/Loaders/Backhoes	1	6	84	0.37	220	41,025.60	100	Tractors/Loaders/Backhoes 100	0.05650435	2,318.12
Building Construction	Welders	3	8	46	0.45	220	109,296.00	50	Welders 50	0.02580036	2,819.88
Paving	Cement and Mortar Mixers	1	8	10	0.56	10	448.00	15	Cement and Mortar Mixers 15	0	0.00
Paving	Pavers	1	8	81	0.42	10	2,721.60	100	Pavers 100	0.05653944	153.88
Paving	Paving Equipment	1	8	89	0.36	10	2,563.20	100	Paving Equipment 100	0.05961036	152.79
Paving	Rollers	2	8	36	0.38	10	2,188.80	50	Rollers 50	0.05799746	126.94
Paving	Tractors/Loaders/Backhoes	1	8	84	0.37	10	2,486.40	100	Tractors/Loaders/Backhoes 100	0.05650435	140.49
Architectural Coating	Air Compressors	1	6	37	0.48	10	1,065.60	50	Air Compressors 50	0.02761098	29.42
											21,703.78

Notes:
Equipment assumptions are provided in the CalEEMod output files.
Source of usage estimates: California Air Resource Board (CARB). 2023. OFFROAD2021 (v1.0.5) Emissions Inventory
Website: https://arb.ca.gov/emfac/emissions-inventory/. Accessed October 17, 2023.

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Solano
Calendar Year: 2024
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	CalYr	Vehicle Class + HP Bin	Model Year	Fuel	Fuel Consumption (gallons/year)	Horsepower Hours (HP-hours/year)	Fuel (gallons/HP-hour)
Solano	2024	Cranes 100	Aggregate	Diesel	798.3278426	9602.988816	0.083133268
Solano	2024	Cranes 175	Aggregate	Diesel	5949.865188	99666.11276	0.059697976
Solano	2024	Cranes 25	Aggregate	Diesel	1.623454209	28.94865794	0.056080465
Solano	2024	Cranes 300	Aggregate	Diesel	19170.70674	358305.858	0.053503749
Solano	2024	Cranes 50	Aggregate	Diesel	66.79424819	779.9443291	0.085639764
Solano	2024	Cranes 600	Aggregate	Diesel	26554.57368	513297.1863	0.051733332
Solano	2024	Cranes 75	Aggregate	Diesel	263.9076137	3281.019493	0.080434638
Solano	2024	Excavators 100	Aggregate	Diesel	22093.16942	392075.7356	0.056349239
Solano	2024	Excavators 175	Aggregate	Diesel	124610.1631	2469560.859	0.05045843
Solano	2024	Excavators 25	Aggregate	Diesel	0.967263374	17.24777724	0.056080465
Solano	2024	Excavators 300	Aggregate	Diesel	133014.835	2637957.405	0.05042342
Solano	2024	Excavators 50	Aggregate	Diesel	35879.6882	639524.5757	0.056103689
Solano	2024	Excavators 600	Aggregate	Diesel	153808.1196	3057650.877	0.050302708
Solano	2024	Excavators 75	Aggregate	Diesel	28507.40038	507096.5955	0.056216904
Solano	2024	Graders 100	Aggregate	Diesel	901.1494921	14918.56086	0.060404586
Solano	2024	Graders 175	Aggregate	Diesel	14473.92815	267897.4407	0.05402787
Solano	2024	Graders 300	Aggregate	Diesel	48074.66718	944703.6862	0.05088862
Solano	2024	Graders 50	Aggregate	Diesel	115.174717	1817.129233	0.063382788
Solano	2024	Graders 600	Aggregate	Diesel	11660.99227	231390.5057	0.050395293
Solano	2024	Graders 75	Aggregate	Diesel	426.7107361	5746.341989	0.074257804
Solano	2024	Cement And Mortar Mixers 15	Aggregate	Diesel	10.43009478	0	0
Solano	2024	Cement And Mortar Mixers 25	Aggregate	Diesel	2.039328377	0	0
Solano	2024	Concrete/Industrial Saws 25	Aggregate	Diesel	1.395741403	0	0
Solano	2024	Concrete/Industrial Saws 50	Aggregate	Diesel	474.5	11322.3	0.041908446
Solano	2024	Pavers 100	Aggregate	Diesel	3061.60465	54149.8975	0.056539436
Solano	2024	Pavers 175	Aggregate	Diesel	10315.72601	204384.6129	0.050472126
Solano	2024	Pavers 300	Aggregate	Diesel	12527.08655	248309.6243	0.05044946
Solano	2024	Pavers 50	Aggregate	Diesel	555.516578	9738.090002	0.057045743
Solano	2024	Pavers 600	Aggregate	Diesel	2213.126292	44249.44174	0.050014784
Solano	2024	Pavers 75	Aggregate	Diesel	2835.234458	49827.25621	0.056901276
Solano	2024	Paving Equipment 100	Aggregate	Diesel	1737.605333	29149.38688	0.059610356
Solano	2024	Paving Equipment 175	Aggregate	Diesel	11462.11101	226509.6615	0.050603188
Solano	2024	Paving Equipment 300	Aggregate	Diesel	5151.601442	101831.8939	0.050589273
Solano	2024	Paving Equipment 50	Aggregate	Diesel	1445.672584	25297.53224	0.057146783
Solano	2024	Paving Equipment 600	Aggregate	Diesel	12251.87405	244168.9682	0.050177851
Solano	2024	Paving Equipment 75	Aggregate	Diesel	1043.436725	18606.06395	0.056080465
Solano	2024	Rollers 100	Aggregate	Diesel	8591.173607	147814.7426	0.058121223
Solano	2024	Rollers 175	Aggregate	Diesel	49488.56922	978178.2178	0.05059259
Solano	2024	Rollers 300	Aggregate	Diesel	4228.345443	81928.37177	0.051610271
Solano	2024	Rollers 50	Aggregate	Diesel	13926.8254	240128.2039	0.057997458
Solano	2024	Rollers 600	Aggregate	Diesel	3426.813826	69710.33645	0.049157901
Solano	2024	Rollers 75	Aggregate	Diesel	5532.063335	97930.63728	0.056489608
Solano	2024	Forklifts 100	Aggregate	Diesel	12309.55899	212400.7754	0.057954398
Solano	2024	Rough Terrain Forklifts 175	Aggregate	Diesel	79265.40469	1570229.601	0.050480137
Solano	2024	Rough Terrain Forklifts 300	Aggregate	Diesel	677.8652778	13106.80531	0.051718574
Solano	2024	Rough Terrain Forklifts 50	Aggregate	Diesel	444.1825123	7920.449828	0.056080465
Solano	2024	Rough Terrain Forklifts 600	Aggregate	Diesel	191.828253	3789.733429	0.050617875
Solano	2024	Rough Terrain Forklifts 75	Aggregate	Diesel	17688.96465	313545.7235	0.056415902
Solano	2024	Rubber Tired Dozers 100	Aggregate	Diesel	600.3790469	10140.20708	0.05920777
Solano	2024	Rubber Tired Dozers 175	Aggregate	Diesel	1864.607893	36886.8566	0.050549384
Solano	2024	Rubber Tired Dozers 300	Aggregate	Diesel	2318.674572	45940.4217	0.050471338
Solano	2024	Rubber Tired Dozers 50	Aggregate	Diesel	135.2106179	1395.984305	0.096856832
Solano	2024	Rubber Tired Dozers 600	Aggregate	Diesel	12121.87662	270474.4626	0.044817084
Solano	2024	Rubber Tired Dozers 75	Aggregate	Diesel	283.7046927	4500.669227	0.063036113

Solano	2024	Tractors/Loaders/Backhoes 100	Aggregate	Diesel	147982.3374	2618954.853	0.056504348
Solano	2024	Tractors/Loaders/Backhoes 175	Aggregate	Diesel	157523.0402	3111960.807	0.050618581
Solano	2024	Tractors/Loaders/Backhoes 25	Aggregate	Diesel	3.239370487	57.76290311	0.056080465
Solano	2024	Tractors/Loaders/Backhoes 300	Aggregate	Diesel	66633.31187	1319740.743	0.050489698
Solano	2024	Tractors/Loaders/Backhoes 50	Aggregate	Diesel	13946.30293	235391.924	0.05924716
Solano	2024	Tractors/Loaders/Backhoes 600	Aggregate	Diesel	50600.68191	1007851.995	0.050206461
Solano	2024	Tractors/Loaders/Backhoes 75	Aggregate	Diesel	63494.23259	1108569.679	0.057275816
Solano	2024	Trenchers 100	Aggregate	Diesel	1640.306114	28601.79344	0.057349764
Solano	2024	Trenchers 175	Aggregate	Diesel	2678.277288	52496.91778	0.051017801
Solano	2024	Trenchers 300	Aggregate	Diesel	1614.712155	31873.66474	0.050659758
Solano	2024	Trenchers 50	Aggregate	Diesel	4276.809634	74939.27013	0.05707034
Solano	2024	Trenchers 600	Aggregate	Diesel	2629.681734	53262.76704	0.049371857
Solano	2024	Trenchers 75	Aggregate	Diesel	1370.23959	23307.40217	0.058789889
Solano	2024	Air Compressors 15	Aggregate	Diesel	158.8239424	0	0
Solano	2024	Air Compressors 25	Aggregate	Diesel	634.1898238	0	0
Solano	2024	Air Compressors 50	Aggregate	Diesel	9146.9	331277.65	0.027610978
Solano	2024	Welders 15	Aggregate	Diesel	3637.223169	0	0
Solano	2024	Welders 25	Aggregate	Diesel	5802.828751	0	0
Solano	2024	Welders 50	Aggregate	Diesel	41993.25	1627622.6	0.025800361
Solano	2024	Rental Generator 100	Aggregate	Diesel	41037.75938	2594400.245	0.015817821
Solano	2024	Rental Generator 175	Aggregate	Diesel	83491.20966	5278300.229	0.015817821
Solano	2024	Rental Generator 300	Aggregate	Diesel	110854.2881	7008189.445	0.015817821
Solano	2024	Rental Generator 50	Aggregate	Diesel	255.1169554	14507.6998	0.017584935
Solano	2024	Rental Generator 600	Aggregate	Diesel	383877.656	24268680.83	0.015817821
Solano	2024	Rental Generator 75	Aggregate	Diesel	24504.95362	1549199.046	0.015817821
Solano	2025	Scrapers 600	Aggregate	Diesel	130473.6962	2760627.093	0.04726234

Operational Fuel Calculation—Project-Generated Operational Trips (Page 1 of 2)

California Air Resource Board (CARB). 2023. EMFAC2021 Web Database. Website: https://arb.ca.gov/emfac/emissions-inventory/. Accessed October 16, 2023.

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Solano
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled
FE = Fuel Economy

						Given			*Calculations*	
Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
Solano	2025	LDA	Aggregate	Aggregate	Gasoline	155086.2886	6585579.464	218.4922354	30.14102287	198496101.2
Solano	2025	LDA	Aggregate	Aggregate	Diesel	479.6275964	15772.03518	0.371113442	42.4992291	670299.3364
									Sum of VMT*FE	**199166400.6**
									Total VMT	**6601351.499**
									Weighted Average Fuel Economy	**30.17054926**
Solano	2025	LDT1	Aggregate	Aggregate	Gasoline	14247.9777	495747.6426	19.72472627	25.13330912	12459778.75
Solano	2025	LDT1	Aggregate	Aggregate	Diesel	4.73364108	44.0006713	0.001802964	24.40463707	1073.820414
Solano	2025	LDT2	Aggregate	Aggregate	Gasoline	64749.54165	2660496.722	108.5065751	24.51922124	65233307.75
Solano	2025	LDT2	Aggregate	Aggregate	Diesel	219.0295772	9538.013995	0.291035356	32.77269858	312586.4577
Solano	2025	MDV	Aggregate	Aggregate	Gasoline	47085.68566	1773609.679	88.88428211	19.95414304	35390861.24
Solano	2025	MDV	Aggregate	Aggregate	Diesel	720.212249	28708.13071	1.179461669	24.34002857	698756.7217
									Sum of VMT*FE	**114096364.7**
									Total VMT	**4968144.189**
									Weighted Average Fuel Economy	**22.96559045**
Solano	2025	LHDT1	Aggregate	Aggregate	Gasoline	5904.305917	230912.0123	23.94284975	9.644299434	2226984.59
Solano	2025	LHDT1	Aggregate	Aggregate	Diesel	5076.45104	191839.3716	12.07682581	15.88491668	3047352.434
Solano	2025	LHDT2	Aggregate	Aggregate	Gasoline	723.505783	28253.12039	3.261136799	8.663580258	244773.176
Solano	2025	LHDT2	Aggregate	Aggregate	Diesel	1970.093551	78286.15139	5.987907108	13.0740424	1023516.462
Solano	2025	MHDT	Aggregate	Aggregate	Gasoline	364.0983135	23497.00016	4.890693402	4.80443124	112889.7216
Solano	2025	MHDT	Aggregate	Aggregate	Diesel	2735.20074	113820.27	13.40701835	8.489603507	966288.9633
Solano	2025	HHDT	Aggregate	Aggregate	Gasoline	0.547217457	46.52327969	0.012409923	3.748877354	174.4100697
Solano	2025	HHDT	Aggregate	Aggregate	Diesel	4742.416061	696573.8146	113.5149461	6.136406163	4274459.848
									Sum of VMT*FE	**11896439.61**
									Total VMT	**1363228.264**
									Weighted Average Fuel Economy	**8.726667369**
Solano	2025	MCY	Aggregate	Aggregate	Gasoline	9290.951028	53171.39051	1.307154279	40.67721106	2162863.874
									Weighted Average Fuel Economy	**40.67721106**
Solano	2025	MH	Aggregate	Aggregate	Gasoline	1138.918238	10687.9639	2.420127688	4.416280988	47201.05176
Solano	2025	MH	Aggregate	Aggregate	Diesel	460.2238227	4477.59523	0.476846226	9.390019228	42044.7053
Solano	2025	OBUS	Aggregate	Aggregate	Gasoline	163.98328	10217.16721	2.12608642	4.805621779	49099.84124
Solano	2025	OBUS	Aggregate	Aggregate	Diesel	142.2120279	12064.96232	1.884143728	6.403419302	77257.01257
Solano	2025	SBUS	Aggregate	Aggregate	Gasoline	32.41667082	1972.547968	0.196336129	10.04679056	19817.7763
Solano	2025	SBUS	Aggregate	Aggregate	Diesel	316.4659956	6980.043272	0.859963263	8.11667611	56654.75047
Solano	2025	UBUS	Aggregate	Aggregate	Gasoline	38.84372104	1865.875276	0.265124077	7.037743595	13131.55177
Solano	2025	UBUS	Aggregate	Aggregate	Diesel	69.28031532	7307.537684	0.793970611	9.203788635	67257.03229
									Sum of VMT*FE	**372463.7217**
									Total VMT	**55573.69285**
									Weighted Average Fuel Economy	**6.702158928**

Operational Fuel Calculation—Project-Generated Operational Trips (Page 2 of 2)

Total Operational VMT

Dixon WWTF Improvements Project

Trip Type	Annual VMT
Staff Trips	23,493.22

Fleet Mix

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
0.506181587	0.038016549	0.2047342	0.138198987	0.032415933	0.008169269	0.010529279	0.053415787	0.00170856	0.000703403	0.004077101	0.000686471	0.001162872	1.000

*based on EMFAC results

Trip Type 1: Staff Trips with Mixed Fleet

Vehicle Type	Fraction of 1	Annual VMT	Average Fuel Economy (miles/gallon)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.5062	11,892	30.17	394
Light Trucks and Medium Vehicles (LDT1, LDT2, and	0.3809	8,950	22.97	390
Light-Heavy to Heavy-Heavy Diesel Trucks	0.1045	2,456	8.73	281
Motorcycles	0.0041	96	40.68	2
Other	0.0043	100	6.70	15
Total	1.0000	23493		**1,083**

Operational Equipment Fuel Calculation

Dixon WWTF Improvements Project

Equipment	Number of units	Fuel type	horsepower	kW	Hours of operation	hours/yr	kwhr/yr
junction structure gates motor operators	2	electricity	1	0.746	1 hour/day	365	544.58
influent pumps	2	electricity	85	63.41	One pump is estimated to run 50 hour per Year	50	3170.5
blowers	2	electricity	150	111.9	One Blower 24 hours/day	8760	980244
RAS pump	2	electricity	15	11.19	One Pump 24 hours/day	8760	98024.4
Secondary Clarifier 3	1	electricity	1.5	1.119	24 hours/day	8760	9802.44
Effluent pumps	2	electricity	100	74.6	One pump is estimated to run 50 hour per Year	50	3730
Plant water pumps	2	electricity	10	7.46	One pump is estimated to run 12 hours/day	4380	32674.8
						total	*1,128,191*
						building defau	39651.79
							1,167,843

Appendix C Native American Consultations

Record of Contact with Native Americans for the City of Dixon WWTF Expansion Project			
Name & Affiliation	**Date of Contact**	**Form of Contact**	**Notes**
Wayne Mitchum Jr., Cachil Dehe Band of Wintun Indians of the Colusa Indian Community	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Jennie Mitchum, Cachil Dehe Band of Wintun Indians of the Colusa Indian Community	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Lloyd Mathiesen, Chicken Ranch Rancheria of Me-Wuk Indians	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Charlie Wright, Cortina Rancheria - Kletsel Dehe Band of Wintun Indians	10/30/2023	USPS Mail	Sent proposed Project introductory letter and map.
Michael Derry, Guidiville Rancheria of California	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Bunny Tarin, Guidiville Rancheria of California	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Leland Valdez, Nashville Enterprise Miwok-Maidu-Nishinam Tribe	10/30/2023	USPS Mail	Sent proposed Project introductory letter and map.
Cosme Valdez, Nashville Enterprise Miwok-Maidu-Nishinam Tribe	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Gene Whitehouse, United Auburn Indian Community of the Auburn Rancheria	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Dahlton Brown, Wilton Rancheria	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Cultural Preservation Department, Wilton Rancheria	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Herbert Griffin, Wilton Rancheria	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Anthony Roberts, Yocha Dehe Wintun Nation	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.
Yvonne Perkins, Yocha Dehe Wintun Nation	10/30/2023	USPS Mail & Email	Sent proposed Project introductory letter and map.