INITIAL STUDY/STATE CEQA GUIDELINES SECTION 15183 ANALYSIS

FOR THE

CITYWIDE WASTEWATER MASTER PLAN UPDATE PROJECT

August 2022

Prepared For:

City of Tracy
Department of Development Services
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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Section 1.0 **INTRODUCTION**

This Initial Study provides an analysis of the proposed Wastewater Master Plan Updates Project. The proposed Citywide Wastewater Master Plan (WWMP) identifies the wastewater infrastructure necessary to serve buildout of the City's General Plan. The WWMP is described in greater detail below under Section 3.0: Project Description**. Figure 1-1: Regional Location Map** and **Figure 1-2: Future Infrastructure Service Area** provide an overall depiction of the Project area.

The WWMP Update identifies specific policies, design guidelines, and preliminary capital costs associated with maintaining and upgrading existing City wastewater infrastructure, and constructing new facilities to serve future residential areas at buildout of the City's Sphere of Influence (SOI). It includes an analysis of the existing wastewater system, along with forecasted trends, to identify future needs for wastewater facilities to serve the City's anticipated population at buildout.

The proposed WWMP is consistent with the development assumptions in the General Plan. Thus, as described in greater detail below, this Initial Study/California Environmental Quality Act Guidelines Section 15183 Analysis is limited to analyzing only those significant impacts effects associated with implementation of the WWMP that is not addressed in the General Plan EIR or were not known at the time the General Plan EIR was prepared.

The City has chosen to refer to the level of analysis in the WWMP as a "Tier 1" evaluation, in which overall planning objectives, goals, and policies, are defined and required "backbone" infrastructure is identified and sized to serve buildout of the City's General Plan. A "Tier 2" evaluation, including evaluation of required onsite infrastructure to meet the needs of specific proposed development projects and phasing of recommended buildout improvements, will be initiated at a later date on a project-by-project basis and is not included in the WWMP. Thus, the analysis contained herein is focused on the Tier 1 evaluation, and is broad in its consideration of environmental effects.

The recommendations in the WWMP only identify facility improvements at a Master Plan level and do not necessarily include all required onsite infrastructure, nor constitute design of improvements. Subsequent detailed design is required to determine the exact sizes and final locations of these proposed facility improvements. It should also be noted that the buildout hydraulic model is not an "all pipes" model (i.e., not all smaller diameter pipelines are included); therefore, the hydraulic simulations performed may not identify all necessary improvements. Consequently, the WWMP recommends that further hydraulic evaluations be performed as additional details are provided for each future development project.

Further, while the WWMP provide detailed recommendations of specific improvements, it must be emphasized that these are preliminary "Tier 1" recommendations based on qualitative assessment and preliminary engineering design (only) and as a result do not as of yet, have the specific identified project details and in many instances specific identified project locations necessary for a meaningful evaluation of potential environmental impacts. The WWMP indicates the right-of-way that would be necessary based on a qualitative assessment only, as the buildout year is in the distant future and subject to change. Additionally, it should be noted that new wastewater infrastructure is recommended in locations that

currently do not have that specific facility and expansions of existing wastewater infrastructure would occur in locations with existing facilities.

As the WWMP Update is a policy document prepared to implement the objectives and actions identified in the General Plan, it does not propose the construction or operation of specific wastewater infrastructure projects at this time. Consequently, adoption of the WWMP would not directly result in the construction and operation of infrastructure that could have negative environmental effects. However, their adoption would indirectly facilitate the construction and operation of water supply and wastewater infrastructure that could result in negative environmental effects. Nonetheless, because specific project details are not available at this time, additional future environmental review would be required on a project-by-project basis, as specific wastewater infrastructure projects come forward. This future environmental review would be necessary to analyze and disclose any site-specific impacts the infrastructure identified by the WWMP might have on the environmental resources identified by the CEQA Guidelines.

SOURCE: USGS, 2022

Figure 1-1: Regional Location Map

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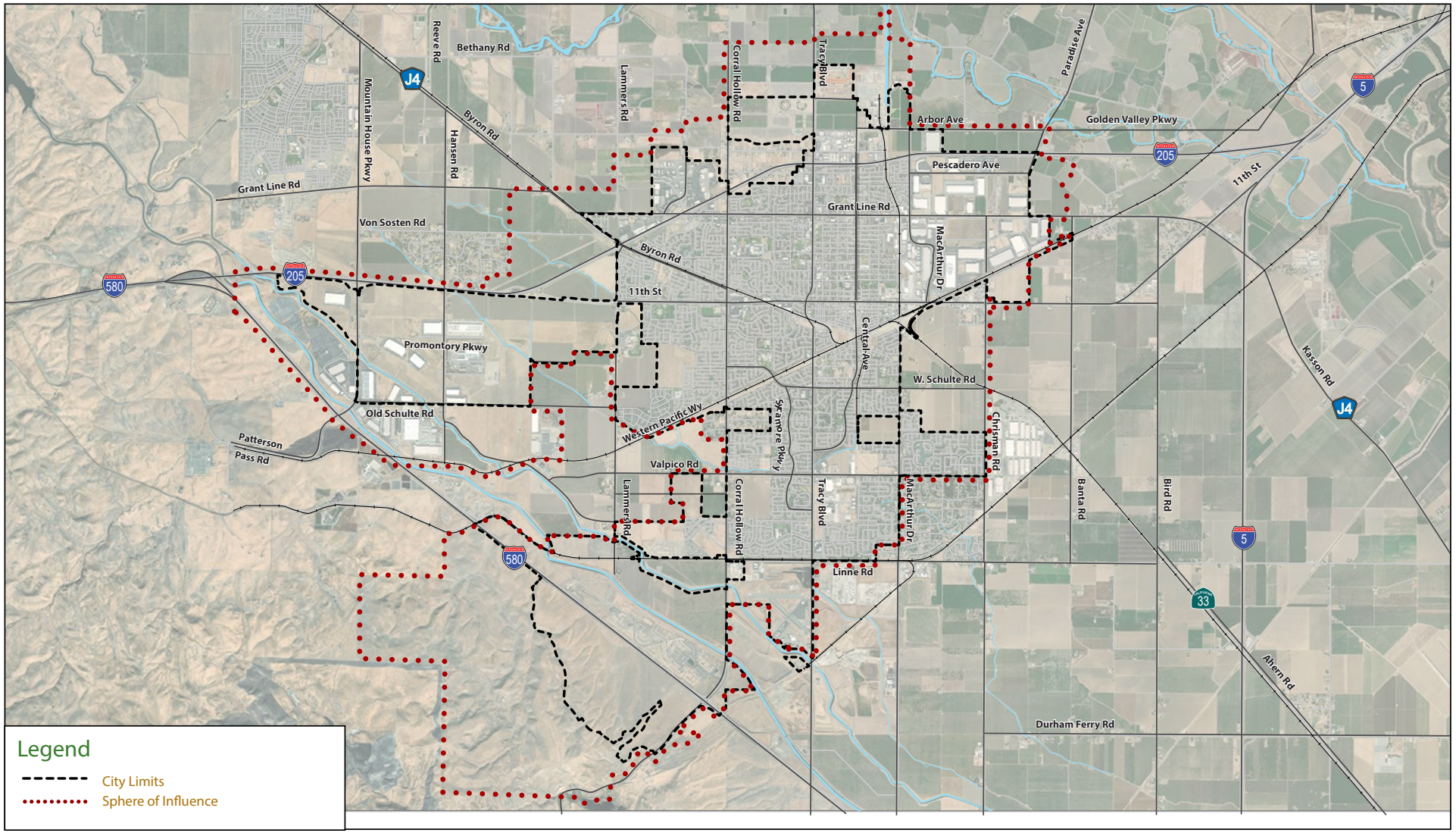

SOURCE: City of Tracy, 2022

Figure 1-2: Future Infrastructure Service Area

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California Environmental Quality Act

This Initial Study has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] §§ 21000 et seq.); the State CEQA Guidelines (Title 14, California Code of Regulations [CCR] §§ 15000 et seq.); and the rules, regulations, and procedures for implementing CEQA as set forth by the City of Tracy (City).

CEQA Section 21094(a)(1)(2)

According to § 21094(a)(1)(2), a subsequent project that is consistent with the following:

> (1) a program, plan, policy, or ordinance for which an Environmental Impact Report (EIR) was prepared and certified; and,
>
> (2) applicable local land use plans and zoning

may rely on the analysis contained within the previously certified EIR prepared for the program, plan, policy, or ordinance and need not conduct new or additional analysis for those effects that were either:

> (1) avoided or mitigated by the certified EIR; or,
>
> (2) were sufficiently examined by the certified EIR to enable those effects to be mitigated or avoided by site-specific revisions; the imposition of conditions; or, by other means in connection with approval of the subsequent project.

State CEQA Guidelines Section 15183

Section 15183 of the State CEQA Guidelines, enables public agencies to streamline the environmental review of subsequent projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified by limiting its examination of environmental effects which are peculiar to the project or its site.

In approving a project meeting the requirements of this section, a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

(1) Are peculiar to the project or the parcel on which the project would be located;

(2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent;

(3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoningaction; or,

(4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR.

Based on the analysis and evaluation provided in this Initial Study, the proposed Citywide WWMP Update is consistent with the development assumptions in the General Plan. Thus, as described in greater detail below, this Initial Study/California Environmental Quality Act Guidelines Section 15183 analysis is limited to analyzing only those significant effects associated with implementation of the WWMP that are not addressed in the General Plan EIR or were not known at the time the General Plan EIR was prepared, consistent with the provisions of State CEQA Guidelines Section 15183, as described above.

Section 2.0 **INCORPORATION BY REFERENCE**

The City of Tracy General Plan Final EIR (State Clearinghouse No 2008092006) has been cited and incorporated by reference into this Initial Study/California Environmental Quality Act 15183 Analysis, in accordance with Section 15150 of the State CEQA Guidelines, as a means of reducing the redundancy and length of this environmental document. The City of Tracy General Plan Final EIR is available for public review at the City of Tracy Planning Division, located at 333 Civic Center Plaza, Tracy, CA 95376, and online at the City of Tracy website: https://www.cityoftracy.org/our-city/departments/planning/general-plan-zoning-ordinance. This document is hereby incorporated by reference into this Initial Study/State CEQA Guidelines 15183 Analysis.

City of Tracy General Plan Final EIR (State Clearinghouse No. 2008092006)

The General Plan EIR assesses the potential environmental consequences of adoption and implementation of the City of Tracy General Plan and Sustainability Action Plan. The assessment is designed to inform City of Tracy decision-makers, other responsible agencies, and the public-at-large of the nature of the General Plan and Sustainability Action Plan and their effects on the environment. The General Plan EIR has been prepared in accordance with and in fulfillment of CEQA requirements. The General Plan EIR consists of the Draft EIR, the Final EIR, and its various amendments and supplements.

The General Plan EIR is a Program EIR. As a Program EIR, the General Plan EIR is not project-specific and does not evaluate the impacts of specific projects that may be proposed under the General Plan. Such projects would require separate environmental review to secure the necessary discretionary development permits. While subsequent environmental review may be tiered off the General Plan EIR, the General Plan EIR is not intended to address impacts of individual projects.

General Plan EIR Project Description

The City approved an update to the General Plan on February 1, 2011. The General Plan provides a vision for the future and establishes a framework for how the City of Tracy should grow and change over the next two decades. The General Plan establishes goals, objectives, policies, and actions to guide this change in a desired direction. The General Plan presents existing conditions in the City, including physical, social, cultural, and environmental resources and opportunities. The General Plan looks at trends, issues, and concerns that affect the region.

The purpose of the General Plan is to act as the principal policy and planning document for guiding future conservation, enhancement, and development in the City. It represents the basic policy direction of the City of Tracy City Council on basic community values, ideals, and aspirations to govern a shared environment through 2025. The General Plan addresses all aspects of development including land use, transportation, housing, economic development, public facilities, infrastructure, and open spaces, among other topics. In addition, it articulates a vision for the City's long-term physical form and development. It also brings a deliberate overall direction to the day-to-day decisions of the City Council, its commissions, and City staff.

The City of Tracy General Plan is guided by a vision statement and is comprised of nine separate "elements" that set goals, objectives, policies, and actions for a given subject. The goals, objectives, policies, and actions provide guidance to the City on how to accommodate growth and manage its resources over the next 20 years. The goals, objectives, policies, and actions in each element are derived from a number of sources, including the 1993 General Plan, the background information collected for the General Plan Update, discussions with the City Council and Planning Commission, public workshops, and meetings with property owners. Many of the recommendations from the Tracy Tomorrow 2000 final report are also brought forward into the General Plan. In addition to the goals, objectives, policies, and actions, each element contains background information that describes current conditions in the City of Tracy relative to the subject of the element.

Five of these elements cover six topics required by State law, while the remaining four elements have been prepared by the City to meet local needs and concerns. Some elements also have additional sections that are specific to them. For example, the Land Use Element contains a series of land use designations that guide overall development in the City and the Circulation Element contains information on the network and hierarchy of streets in the City.

The elements that form the General Plan Update are briefly described below:

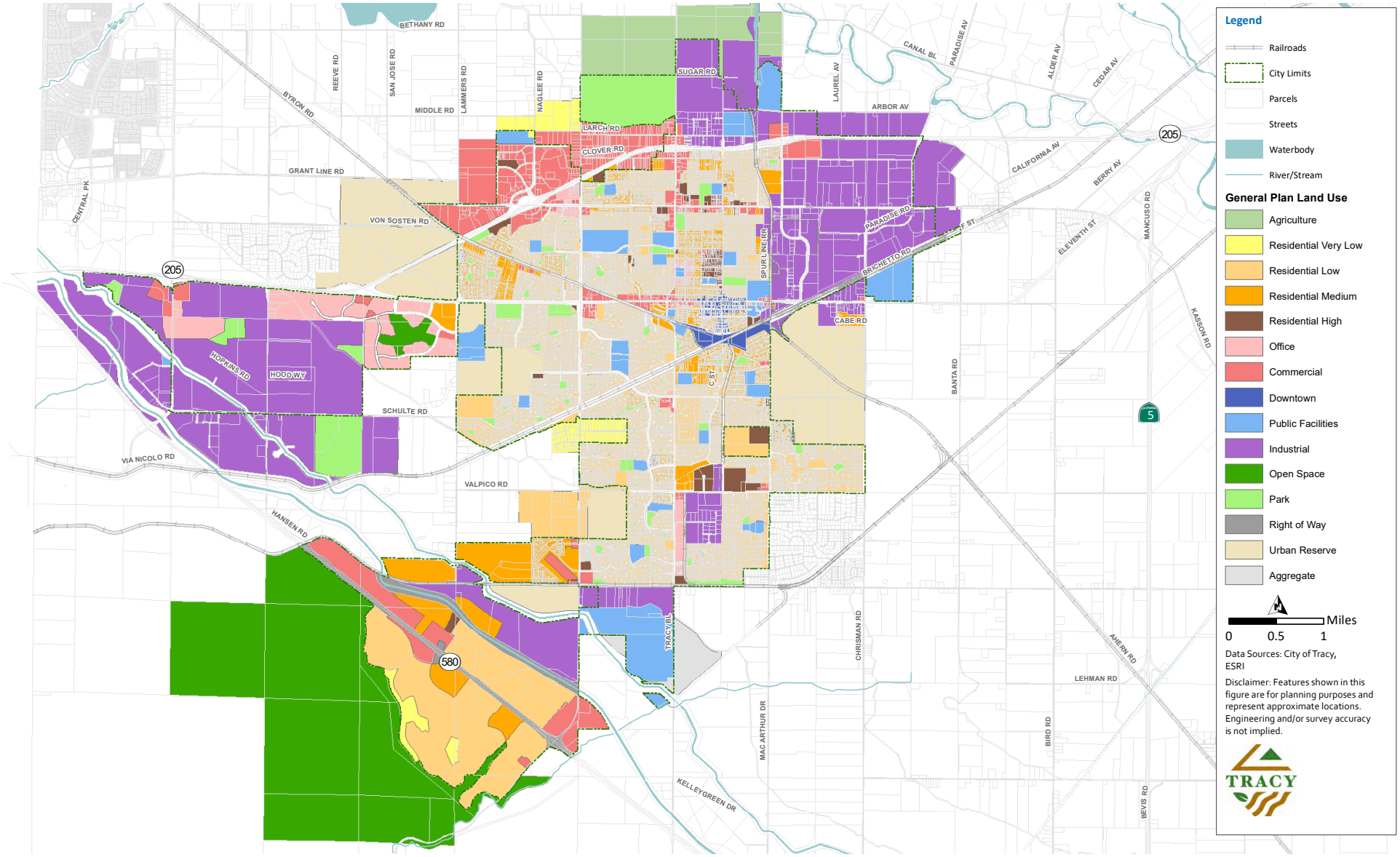
- Land Use Element. The required Land Use Element designates all lands within the City for a specific use such as residential, office, commercial, industry, open space, recreation, or public uses. The Land Use Element provides policy direction for each land use category, and also provides overall land use policies for the City. **Figure 2-1: General Plan Land Use** depicts the City's current Land Use Map.

- Community Character Element. The Community Character Element is not required by State law. However, due to the importance of maintaining and enhancing the City of Tracy's hometown feel and the related importance of urban design for the City, this optional element has been included.

- Economic Development Element. This optional element contains goals, objectives, policies, and actions to encourage the development of desired economic activities throughout the City. The information in this element is derived from the City's Economic Development Strategy prepared in 2002.

- Circulation Element. This required element specifies the general location and extent of existing major streets, level of service, transit facilities, and bicycle and pedestrian network. As required by law, all facilities in the Circulation Element are correlated with the land uses foreseen in the Land Use Element.

- Open Space and Conservation Element. The Open Space Element and the Conservation Element are required under State law and are combined in this General Plan. Issues addressed include the preservation of open space and agricultural land, the conservation, development, and utilization of natural resources, and the provision of parks and recreational facilities. Open space goals for public health and safety are covered in the Safety Element.



SOURCE: City of Tracy, 2020

Figure 2-1: General Plan Land Use

WWMP Update

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- Public Facilities and Services Element. This optional element covers a wide range of topics related to the provision of public services and infrastructure in the City. Topics covered include law enforcement, fire protection, schools, public buildings, solid waste, and the provision of water, wastewater, and stormwater infrastructure.

- Safety Element. State law requires the development of a Safety Element to protect the community from risks associated with the effects of flooding, seismic and other geologic hazards, and wildland fires.

- Noise Element. This required element addresses noise in the community and analyzes and quantifies current and projected noise levels from a variety of sources, such as traffic, industry, rail, and the airport. The Noise Element includes goals, objectives, policies, and actions to address current and foreseeable noise issues.

- Air Quality Element. This element, which is required for all jurisdictions in the San Joaquin Air Pollution Control District, outlines goals, objectives, policies, and actions to mitigate the air pollution impacts of land use, the transportation system, and other activities that occur in the City of Tracy.

In addition, the City has prepared a Housing Element under a separate cover. The Housing Element addresses existing and projected housing demand and establishes goals, objectives, policies, and actions to assist the City in implementing the plan in accordance with other General Plan policies. It is not included with the remainder of the General Plan because it was prepared under a separate timeline and under detailed State criteria.

The Sustainability Action Plan is a detailed, long-range strategy to achieve sustainability in the sectors of greenhouse gas (GHG) emissions, energy, transportation, land use, solid waste, water, agriculture and open space, biological resources, air quality, public health, and economic development. Implementation of the Sustainability Action Plan is intended to support the State of California's emission reduction targets by guiding the City's actions to reduce its GHG emissions, conserve and protect natural resources, improve public health, promote economic vitality, and engage residents.

The Sustainability Action Plan establishes targets related to a variety of sustainability topics, and sets forth measures that will assist the City in reaching those goals. The Sustainability Action Plan sets a target of a 29 percent reduction of GHG emissions from 2020 Business As Usual (BAU) projected levels. GHG emissions in 2020 under BAU conditions are projected to be 1,748,970 metric tons carbon dioxide equivalent (MTCO2e). The target therefore translates into a reduction of 507,201 MTCO2e. Implementation of the Sustainability Action Plan is projected to reduce GHG emissions in the City of Tracy by between 382,422 and 486,115 MTCO2e, which represents an achievement of between 75 and 96 percent of the overall target.

Environmental Effects

Under CEQA, a significant impact on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. Implementation of the General Plan and Sustainability Action Plan has the potential to generate 22 environmental impacts in a number of areas, including both plan level and cumulative impacts. Some of the impacts can be reduced to a less than significant level with mitigation measures, while others cannot and are considered significant and unavoidable.

A brief summary of the impacts identified is provided below.

Visual Resources (Aesthetics)

Despite General Plan policies to enhance "hometown feel" and preserve open space, development permitted under the General Plan for both 2025 and total buildout of the City limits and SOI would result in a significant and unavoidable impact on the existing visual identity and character of the City. Furthermore, in spite of General Plan policies to protect scenic resources, including those along state designated scenic highways for development projected through 2025, a significant and unavoidable impact would occur on scenic resources along the state designated scenic routes I-580 (between I-205 and I-5) and I-5 (south of I-205) at total buildout of the General Plan. In addition, a significant and unavoidable impact on scenic views from regional roadways would occur as a result of development projected for the 20-year development scenario and under total buildout of the City limits and SOI. However, General Plan objectives and policies would positively affect corridors and gateways and enhance the visual character of streetscapes throughout the City. Development permitted under the General Plan would increase levels of light and glare to a significant level resulting in adverse, but mitigable impacts on the visual quality of the City of Tracy.

Agricultural Resources

Despite General Plan policies to preserve agricultural lands, in addition to policies in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and the City's Agricultural Mitigation Fee Ordinance, development permitted under the General Plan would result in the conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to urban uses. This is a significant and unavoidable impact. No additional mitigation is available. Moreover, despite policies in the General Plan to support and encourage preservation of Williamson Act lands and the voluntary nature of the Williamson Act program, total buildout of the City limits and SOI may result in the conversion of land under active contracts to urban uses. This is a significant and unavoidable impact. No additional mitigation is available. Finally, implementation of the General Plan would result in additional and incompatible urban development adjacent to agricultural uses, resulting in a significant and unavoidable impact associated with the conversion of additional farmland to urban uses.

Air Quality

As stated in the General Plan EIR, the air quality analysis relies on modeled traffic data that extends to the year 2030 and, thus, air quality impacts extend to that year as well. The General Plan and Sustainability

Action Plan would not be consistent with applicable clean air planning efforts of the San Joaquin County Valley Air Pollution Control District (SJVAPCD), since vehicle miles traveled (VMT) that could occur under the proposed General Plan would exceed that projected by the San Joaquin Council of Governments (SJCOG), which are used in projections for air quality planning. The projected growth could lead to an increase in the region's VMT beyond that anticipated in the SJCOG and SJVAPCD clean air planning efforts. Development in Tracy would contribute to the on-going air quality issues in the San Joaquin Valley Air Basin. Mitigation identified in the General Plan EIR would not reduce the impact to less than significant. However, the General Plan would be consistent with clean air transportation control measures of the SJVAPCD and SJCOG.

The General Plan does not provide adequate buffers between new or existing sources of toxic air contaminants and new or existing residences or sensitive receptors, requiring mitigation which was determined to reduce this impact to less than significant. General Plan policies work to ensure that the General Plan would have a less than significant impact on exposure to odors. Sensitive receptors would not be significantly impacted by carbon monoxide (CO) concentrations, resulting in a less than significant impact. Particulate matter from construction associated with development allowed under the General Plan would be a less than significant impact with the incorporation of construction air pollutant control measures recommended by the SJVAPCD. Construction exhaust emissions would be reduced to a less than significant impact with adherence to General Plan policies and SJVAPCD rules and regulations.

Biological Resources

Development allowed under the proposed General Plan does have the potential to significantly impact biological resources, but these potential impacts would be addressed through General Plan goals, objectives, and policies, resulting in less than significant impacts on biological resources.

Cultural Resources

The implementation of a combination of General Plan policies and guiding mechanisms would reduce potential impacts on historical resources to a less than significant level. However, undiscovered archaeological and paleontological sites, including human remains (especially in undeveloped areas), could be negatively impacted by development identified by the General Plan, requiring the implementation of mitigation measures identified in the General Plan EIR to reduce the potentially significant impact on archaeological and paleontological resources to a less than significant level.

Geology, Soils, and Seismic Hazards

Increased development proposed under the General Plan could increase the number of people and buildings exposed to geologic hazards. The General Plan Update includes a series of policies and actions within the Safety Element to minimize harm from geologic hazards and did not identify any significant impacts.

Greenhouse Gas Emissions

Although the General Plan and Sustainability Action Plan include many goals, policies, and measures that would reduce GHG emissions from projected BAU levels by 22 and 28 percent, the General Plan would not meet the SJVAPCD's threshold of a 29 percent reduction in GHG emissions from BAU projected emissions. Therefore, the proposed General Plan and Sustainability Action Plan would result in a significant GHG emission impact. All feasible GHG emissions reduction measures were incorporated into the General Plan and Sustainability Action Plan; therefore, no additional mitigation would be feasible, and the impact is considered significant and unavoidable.

Taken together, policies and actions from the General Plan in combination with Sustainability Action Plan policies would ensure adequate emergency preparedness to handle impacts associated with climate change. Therefore, the related impact would be less than significant.

Hazards and Hazardous Materials

Implementation of the General Plan would allow for the development of new residential, commercial, office, and industrial uses. This could increase the amount of hazardous materials used and wastes generated, as well as the number of people and structures exposed to these and other hazards. Implementation of a combination of Federal, State, and local policies and regulations, including policies and actions identified by the General Plan, would reduce the risk to less than significant.

Hydrology and Flooding

Some development would occur within the 100-year floodplain, within the 20-year planning horizon, and under total buildout of the General Plan. However, the implementation of the General Plan and its policies would reduce the potential impact associated with exposure to the 100-year flood plain to a less than significant level. Portions of the SOI have the potential to experience flooding from dam failure during the 20-year planning horizon of the General Plan and at total buildout, but the General Plan includes policies and actions that would reduce this risk to a less than significant level. Moreover, risk of dam failure is small, because the County continues to maintain the dam to withstand probable seismic activity. Development proposed under the General Plan is not anticipated to significantly alter existing drainage patterns or stream alignments, and there would not be a significant increase in storm water runoff or flooding, especially in light of General Plan policies and actions that are designed to mitigate such risk. The City of Tracy is at a low risk for seiche and tsunami and implementation of the General Plan is not expected to increase these risks. No new development is proposed in the hillsides, where there is a risk of mudflow. Thus, no impact associated with seiche, tsunami, or mudflow would be expected.

Land Use

No significant land use impacts were identified as a result of implementation of the General Plan and Sustainability Action Plan. The proposed General Plan and Sustainability Action Plan would not physically divide an established community with the implementation of policies identified in the General Plan, and due to the fact that the majority of development would occur on vacant land where no established community exists. Implementation of policies and actions in the proposed General Plan and Sustainability Action Plan and the LAFCO process would result in less than significant land use impacts related to conflicts

with other plans, policies, and regulations applicable in the City of Tracy area. Furthermore, implementation of General Plan policies designed to minimize conflict and encourage an orderly land use pattern would ensure land use compatibility.

Mineral Resources

The policies in the General Plan would minimize potential land use conflicts between aggregate resource activities and other uses, and in general ensure that new development would not impact the future availability of mineral resources or mineral resource recovery sites. Therefore, this impact would be less than significant.

Noise

Despite General Plan policies and regulations, significant noise level increases (3 dBA Ldn or greater) associated with increased traffic would occur adjacent to existing noise sensitive uses along portions of I-205, Grant Line Road, Schulte Road, Linne Road, Lammers Road, Corral Hollow Road, Tracy Boulevard, and MacArthur Drive. New roadways facilitated by the General Plan would also increase existing noise levels at receivers in the City of Tracy. This is a significant and unavoidable impact. No additional mitigation is available. Under the General Plan, new noise sensitive development is proposed throughout the City, and in some cases, in noisy areas. However, General Plan policies would adequately reduce this noise impact to a less than significant level. Additionally, development under the proposed General Plan would introduce new noise-generating sources adjacent to existing noise-sensitive areas and new noise-sensitive uses adjacent to existing noise-generating sources. Regardless, according to the General Plan EIR, General Plan policies would adequately reduce these impacts to a less than significant level. The General Plan EIR found that no significant impacts would occur with regard to airport noise, and noise associated with construction could be reduced to less than significant with the implementation of mitigation identified by the General Plan EIR.

Population, Employment, and Housing

While General Plan policies and other regulations would reduce impacts to future population and housing growth to the extent feasible for development projected through 2025, a significant and unavoidable impact would occur by inducing substantial population growth at total buildout of the General Plan. However, implementation of the General Plan and Sustainability Action Plan would not displace housing or populations, given that a majority of growth proposed in the General Plan would occur on vacant and agricultural land, growth is encouraged in existing neighborhoods and infill areas, and General Plan policies encourage the preservation and enhancement of the character of existing neighborhoods while specifically stating that new development should not physically divide established neighborhoods.

Traffic and Circulation

There would be a less than significant impact on local roadways with the implementation of roadway improvements identified in the General Plan EIR. Assuming the planned network improvements outlined in the General Plan EIR are implemented, the City's level of service standards would be maintained except at the Eleventh Street/Corral Hollow Road and Eleventh Street/Lammers Road intersections. In the case

of the Eleventh Street/Corral Hollow Road intersection, General Plan Policy 2 under Objective CIR-1.3, which allows individual locations to fall below the City's level of service standards in instances where the construction of physical improvements would be infeasible or would conflict with the character of the community, would apply, since this intersection is constrained to the point of not allowing for adequate at-grade improvements. Thus, the resulting level of service would not result in a significant impact. Further improvements at the Eleventh Street/Lammers Road intersection identified in the General Plan EIR would reduce impacts at this intersection to a less than significant level.

While the General Plan incorporates a range of features that work to help reduce the potential impact of future growth in the City on regional roadways, none of these approaches would reduce the potential impact to a less than significant level, so a significant and unavoidable impact on the following regional roadways would occur:

- I-205
- I-580
- I-5
- Patterson Pass Road
- Tesla Road

Regarding design feature hazards, bicycle and pedestrian safety, emergency vehicle access, parking capacity, conflicts with adopted regional policies and plans regarding alternative transportation and air traffic, implementation of existing regulations and goals, objectives, and policies included in the General Plan would ensure that significant impacts do not occur.

Community Services (Public Services)

Increases in population and development facilitated by the General Plan would increase the demand for the following community services: police protection, fire protection and emergency medical services, schools, solid waste disposal, and parks and recreational facilities. The General Plan EIR determined that the construction of new police and fire protection and emergency medical facilities, as well as schools and new individual park or recreation facilities to support the growth permitted under the General Plan, could not be determined at the first tier level of analysis conducted for the General Plan. Policies from the General Plan that are identified in other sections of the General Plan EIR also apply to any potential impacts associated with the construction and operation of these community service facilities. As specific community service facility projects are identified, additional second-tier environmental analysis would be completed pursuant to CEQA.

Infrastructure (Utilities and Service Systems)

Water

No significant water-related impacts were identified for development projected through 2025. However, despite policies in the Public Facilities Element of the General Plan, the General Plan EIR identified an insufficient secured water supply to serve projected development under total buildout of the General

Plan. This is a significant and unavoidable impact of total buildout of the General Plan. No additional mitigation is available.

Wastewater

The City's existing wastewater treatment system is not designed to accommodate development projected under total buildout of the SOI, resulting in a significant impact. However, the General Plan EIR concluded that the specific environmental impact of constructing wastewater treatment facilities in the City limits and SOI could not be determined at that first-tier level of analysis, but as specific wastewater treatment expansion projects are identified, additional project specific, second-tier environmental analysis would be completed.

Stormwater

The policy direction identified in the General Plan, in addition to other regulatory requirements regarding stormwater management, ensure that the General Plan would not have a significant impact on storm drainage facilities. Regardless, development facilitated by the General Plan would increase stormwater runoff in the City and its SOI and result in the need to develop the stormwater collection system to satisfy future conditions and meet the needs of development identified by the General Plan. However, the General Plan EIR determined that the specific environmental impact of constructing new stormwater infrastructure in the City limits and SOI could not be determined at that first-tier level of analysis. As specific stormwater infrastructure expansion projects are identified, additional project specific, second-tier environmental analysis would be completed.

Alternatives to the Project

The General Plan EIR analyzes alternatives to the General Plan. The following four alternatives to the General Plan are considered and described in detail in Chapter 5 of the 2006 Draft General Plan EIR:

- No Project Alternative
- Concentrated Growth Alternative
- City Limits Alternative
- Existing SOI Alternative

As discussed in Chapter 5 of the 2006 Draft General Plan EIR, the Concentrated Growth Alternative is environmentally superior to both the General Plan and the other alternatives. This alternative would offer a substantial improvement with respect to visual quality, community character, and agriculture, although it would not avoid the significant and unavoidable impacts associated with those areas for the General Plan. The Concentrated Growth Alternative would also offer an insubstantial improvement with respect to land use; population, employment and housing; traffic and circulation; biology; infrastructure; hydrology and flooding; hazardous materials and other hazards; and air quality.

The City Limits Alternative is also environmentally superior to the General Plan, but on balance it is marginally inferior to the Concentrated Growth Alternative. As shown in Table 5-1 of the 2006 Draft General Plan EIR, the City Limits Alternative does not offer as much of an improvement as the

Concentrated Growth Alternative with respect to visual quality, and it also does not offer improvements with respect to land use, hazardous materials and hazards, and air quality.

The City of Tracy has developed the General Plan to represent the best possible balance between on-going residential growth, development of employment areas, and open space and agricultural preservation. Although two of the alternatives each have the potential of substantially reducing significant impacts that have been identified in the General Plan EIR, overall the alternatives analysis shows that none of the alternatives would result in a level of improvement that would completely avoid a significant impact that is associated with the General Plan.

General Plan EIR Revisions and Updates

Since 2005, the General Plan and General Plan EIR have been revised and updated on several occasions as discussed below due to various proposed amendments and the City's preparation of a Sustainability Action Plan. Nonetheless, the City has certified the most recent General Plan EIR and adopted the most current General Plan on February 11, 2011. Thus, where appropriate and based on the provisions of Section 15152 of the CEQA Guidelines, this Initial Study does tier off of and incorporates by reference the General Plan EIR regarding descriptions of environmental settings, future development-related growth, and cumulative impacts. The following provides the timeline for the sequence of revisions and updates to the City of Tracy General Plan EIR.

City of Tracy General Plan Draft EIR (October 4, 2005)

The original 2005 General Plan EIR evaluated the following 15 topics:

1. Land Use
2. Population, Employment and Housing
3. Visual Quality
4. Traffic and Circulation
5. Cultural Resources
6. Biological Resources
7. Agricultural Resources
8. Mineral Resources
9. Community Services
10. Infrastructure
11. Geology, Soils and Seismic Hazards
12. Hydrology and Flooding
13. Hazardous Materials
14. Noise
15. Air Quality

City of Tracy General Plan Amendment to the Draft EIR (March 16, 2006)

An amendment to the General Plan in 2006 (2006 GPA) required the preparation of an Amendment to the Draft EIR. The 2006 City of Tracy General Plan Amendment to the Draft EIR contains a variety of revisions to the 2005 Draft EIR based on the amendments identified in the 2006 GPA. In particular, it was modified to include detailed discussions of impacts that would result from total buildout of the City limits and SOI under the proposed General Plan, in addition to the discussion of impacts during the initial 20-year planning horizon. As such, the following topics identified and evaluated in the 2005 Draft EIR were reanalyzed in the 2006 Draft EIR as follows:

- Land Use,
- Population, Employment and Housing,
- Visual Quality,
- Biological Resources,
- Agricultural Resources,
- Community Services, and
- Infrastructure.

The following other topical areas evaluated in the 2005 General Plan EIR were evaluated under both the 20-year development scenario and at total buildout and thus, did not need to be updated in the 2006 EIR as they remained valid:

- Cultural Resources,
- Mineral Resources,
- Geology, Soils, and Seismic Hazards, and
- Hydrology and Flooding.

It should be noted that the detailed, quantitative analysis of potential impacts on traffic, noise, and air quality were based on the development projections for a 20-year period (2025) in both the 2005 and 2006 Draft EIRs. The traffic analysis was limited to the 20-year planning horizon in part because significant speculation regarding regional growth and funding for transportation improvements would be required to model the total buildout year under the proposed General Plan. The noise and air quality analysis is also limited to the 20-year planning horizon because they are based on the modeling results of the traffic analysis.

City of Tracy General Plan Draft Supplemental EIR (July 22, 2010)

In 2010, the City prepared the City of Tracy General Plan Draft Supplemental EIR (2010 SEIR) in response to another General Plan Amendment and the preparation of its Sustainability Action Plan. The 2010 SEIR contains only those environmental analysis chapters for which the findings of the 2006 General Plan Draft EIR would change as a result of the General Plan Amendment. As a result, the issues addressed in that SEIR include the following:

- Land Use
- Population, Employment and Housing
- Traffic and Circulation
- Noise
- Air Quality
- GHG Emissions

In the 2010 SEIR, the traffic, noise, and air quality analyses extend to a 2030 horizon because the traffic modeling, which also affects the air quality and noise analyses, is based on the SJCOG regional travel demand model, which at that time had been updated to 2030. The land use, population, employment,

and housing analyses were evaluated under a 20-year development scenario and at total buildout in the 2010 General Plan EIR.

Thus, the various General Plan EIRs (2005, 2006, and 2010) have each evaluated the "buildout" condition for specific issue areas, as described above, but none have evaluated the buildout condition for traffic, noise, and air quality as it is generally held that modeling of traffic and associated air quality, GHG, and noise impacts much beyond a 20-year time period is inaccurate and unreliable.

Section 3.0 **PROJECT DESCRIPTION**

As described Section 1.0, the proposed Project consists of updates to the City of Tracy's Wastewater Master Plan. The WWMP Update is a policy document prepared to implement the objectives and actions identified in the General Plan. The Project does not propose the construction or operation of infrastructure projects at this time. Consequently, adoption of the WWMP Update would not directly result in the construction and operation of infrastructure that could have negative environmental effects. However, its adoption would indirectly facilitate the construction and operation of infrastructure that could result in negative environmental effects.

Citywide Wastewater System Master Plan Update

Overview

The purpose of the WWMP Update for the City of Tracy is to update the 2012 Master Plan and to identify existing and future capacity deficiencies in the wastewater system, and to develop and prioritize a capital improvement program (CIP) correct these deficiencies. The WWMP is intended to serve as a guiding document for the planning and implementation of system improvements to accommodate future growth for the planning years of 2040 and buildout. The existing wastewater collection system consists of approximately 210 miles of sanitary sewer pipelines ranging from 4 inches to 48 inches, as well as 3 wastewater lift stations.

A capacity analysis revealed shortcomings in the existing wastewater collection system and identified the system infrastructure improvements to ensure safe and reliable wastewater treatment facilities for the City.

Contents

The Master Plan contains seven chapters, followed by appendices that provide supporting documentation for the information presented in the report. The chapters are briefly described below:

- Introduction. This chapter presents the need for this Master Plan and the objectives of the study.
- Study Area Description. This chapter presents a description of the study area, defines the planning horizon for this study, and summarizes the zoning classifications and future development of the study area.
- Planning and Evaluation Criteria. This chapter presents the planning criteria and methodologies for the analysis used to evaluate the City's existing wastewater collection system and associated facilities, which are utilized to identify existing system deficiencies and to size future improvements. The planning criteria address the collection system capacity, acceptable gravity sewer pipe slopes, and maximum allowable depth of flow, design velocities, and changes in pipe size. This chapter also summarizes existing (2019), interim (2040), and future buildout design flows.
- Wastewater Flows. This chapter summarizes the existing and projected wastewater flows for the City's wastewater collection system. Flow data obtained as part of the temporary flow monitoring program are also presented.

- Wastewater Collection System Facilities and Hydraulic Model. This chapter discusses the wastewater collection system hydraulic model, including modeling software, model elements and the model creation process.
- Capacity Evaluation and Proposed Improvements. This chapter discusses the hydraulic evaluation of the wastewater collection system and the proposed projects that correct capacity deficiencies and serve future users.
- Capital Improvement Program. This chapter presents the capital improvement projects, a summary of the capital costs, and a basic assessment of the possible financial impacts. This chapter presents the recommended CIP for the City's wastewater collection system and a summary of the capital costs.

Existing Wastewater Flows

The City's study area consists of two boundaries which are identified in the General Plan. These boundaries are the City limits and sphere of influence (SOI). There are approximately 7,176 acres of developed land within the City limits (excluding right-of-way such as streets, highways, and railroads). Of the developed acres, 3,842 acres (54%) are classified as residential, 2,329 acres (32%) are classified as commercial/industrial, and the remaining 1,005 (14%) are associated with downtown, public facilities, park, or aggregate.

A temporary flow monitoring program was conducted within the City's sanitary sewer collection system. Flow monitoring was performed over a 1-month period from February 27, 2018 to March 29, 2018 at 16 flow monitoring sites. The temporary flow monitoring program helped develop design flow criteria and correlate actual collection system flows to the hydraulic model predicted flows. Flow monitoring data was used to calibrate the collection system hydraulic model for dry weather and wet weather flow and to help to identify areas of the system with the highest rates of I/I**. Table 3-1:Dry Weather Flow Summary** summarizes the dry weather average daily wastewater flows (ADWF) at each meter.

Future Wastewater Flows

In order to develop wastewater flow projections and allocate future flows to the collection system, relationships between land use and wastewater generation were developed. These relationships, called wastewater flow factors are established based on the average wastewater flow generated (based on flow data collected from the temporary flow monitoring program) for each existing land use type. These wastewater flow factors were compared to the per capita wastewater generation flow rates used to project future wastewater flows in the City's previous capacity analysis studies.

Unit flow factors provide a means to estimate flow per acre for each land use category. Wastewater unit flow factors, expressed in gallons per day per acre (gpd/ac), are applied to land use acreage for calculating average day flow generated from a particular land use type. A unit flow factor was developed for each of the City's existing land use classifications. The wastewater flow factors were developed based on flow monitoring data collected during the 2018 Temporary Flow Monitoring Program only and includes all flowmeter basins within the study area.

Table 3-1:Dry Weather Flow Summary					
Meter Site[(1)]	**Monday- Thursday ADWF (mgd)**	**Friday ADWF (mgd)**	**Saturday ADWF (mgd)**	**Sunday ADWF (mgd)**	**Overall ADWF (mgd)**
TC-01	1.63	1.53	1.64	1.65	1.62
TC-02	1.11	1.08	1.11	1.15	1.11
TC-03	0.27	0.28	0.26	0.26	0.27
TC-04	0.60	0.59	0.61	0.61	0.60
TC-05	2.33	2.30	2.40	2.50	2.36
TC-06	1.35[(2)]	1.33	1.35	1.24	1.32
TC-07	0.34[(3)]	0.32	0.24	0.17	0.28
TC-08	0.44	0.44	0.45	0.47	0.45
TC-09	0.33	0.33	0.35	0.35	0.34
TC-10	1.10	1.12	1.18	1.27	1.14
TC-11	0.33	0.33	0.35	0.39	0.34
TC-12	1.06	1.04	1.14	1.17	1.09
TC-13	0.19	0.18	0.20	0.22	0.19
TC-14	0.62	0.59	0.66	0.69	0.63
TC-15	1.51	1.50	1.59	1.72	1.55
TC-16	0.22	0.21	0.21	0.21	0.21

Notes:
(1) Source: V&A 2018 Sewer Flow Monitoring and Inflow/Infiltration Study
(2) Meter Site TC-06 has a significantly different Monday ADWF compared to the rest of the week. This number is the Tuesday-Thursday ADWF. The Monday ADWF for TC-06 is 1.26.
(3) Meter Site TC-07 has a significantly different Monday ADWF compared to the rest of the week. This number is the Tuesday-Thursday ADWF. The Monday ADWF for TC-07 is 0.19.

Flow factors for residential areas can range between 250 to 4,000 gpd/ac, and commercial and industrial areas may range from 500 to 3,000 gpd/ac or higher. Open space land use types were assumed to generate negligible amounts of wastewater flow. For the City's collection system, the developed flow factors ranged from 350 gpd/ac for very low density residential land uses to 3,600 gpd/ac for high density residential land uses, as shown in **Table 3-2: Wastewater Flow Factors.**

Table 3-2: Wastewater Flow Factors			
Land Use Type	**Expected Developed Acreage**	**Wastewater Flow Factor (gpd/ac)**	**Wastewater Flow (mgd)**
Residential Very Low	76	350	0.03
Residential Low	2,817	1,000	2.82
Residential Medium	792	2,100	1.66
Residential High	158	3,600	0.57
Commercial	501	900	0.45
Industrial	1,828	750	1.37
Downtown	111	800	0.09

Table 3-2: Wastewater Flow Factors			
Land Use Type	**Expected Developed Acreage**	**Wastewater Flow Factor (gpd/ac)**	**Wastewater Flow (mgd)**
Public Facilities	665	550	0.37
Park	227	0	0.00
Aggregate	2	0	0.00
Total	**7,176**	-	**7.35**

For future developments, the WWMP recommends a flow per dwelling unit (du) factor for single family residential and multi-family residential. These flow factors were determined based on the wastewater flow factors presented in **Table 3-2**, and the number of existing single family and multi-family residential units in the system now. A flow factor of 230 gpd/du is recommended for single family residential, and a flow factor of 150 gpd/du is recommended for multi-family residential.

Capacity Analysis Results

A capacity analysis of the existing and future collection system was performed to identify areas in the sewer system where flow restrictions occur or where pipe capacity is insufficient to convey peak wet weather flows (PWWFs). In accordance with the established flow depth criteria for existing sewers, pipelines with a maximum flow d/D ratio greater than 0.90 were identified as capacity deficient. Capacity deficient sewers are shown on **Figure 3-1: Existing Wastewater Capacity Deficiencies.**

Following the completion of the existing system analysis, improvement projects and alternatives were identified to mitigate pipeline capacity deficiencies while maintaining a maximum d/D for new sewers. The goal of the future system analysis is to evaluate the collection system under projected future peak flow and to ensure existing improvements are sized to convey Buildout flows and identify future deficiencies. As part of the future system analysis, the planning years 2040 and Buildout were evaluated. **Figure 3-2: Future Wastewater Capacity Deficiencies** shows the locations of deficiencies under future flow conditions for the planning horizon of the Master Plan.

Recommended Improvements

Figure 3-3: Existing System Improvements, Figure 3-4: 2040 System Improvements, and **Figure 3-5: Build Out System Improvements** illustrate the recommended improvements to mitigate capacity deficiencies and to serve future growth.

Existing Gravity Main Improvements

The following gravity main improvements are recommended to address deficiencies identified under existing conditions:

- Gravity Main along Bessie Avenue (WWGM-1): This project includes the replacement of approximately 440 feet of 8-inch diameter gravity main along Bessie Avenue, between Whittier Avenue and 20th Street. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 8-inch diameter gravity main be replaced with a 12-inch diameter gravity main.
- Gravity Main along Bessie Avenue (WWGM-2): This project includes the replacement of approximately 510 feet of 10-inch diameter gravity main along Bessie Avenue, between 23rd Street and West Grant Line

Road. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 10-inch diameter gravity main be replaced with a 12-inch diameter gravity main.

- Gravity Main along North Central Avenue (WWGM-3): This project includes the replacement of approximately 450 feet of 8-inch and 12-inch diameter gravity main along North Central Avenue, 10th Street and 11th Street. To mitigate capacity deficiencies under existing PWWF conditions, it is recommended that the existing 8-inch and 12-inch diameter gravity mains be replaced with a 15-inch diameter gravity main.

Future Gravity Main Improvements

The following gravity main improvements are recommended to address deficiencies identified under future conditions:

- Gravity Main along MacArthur Drive (WWGM-4): This project includes the replacement of approximately 600 feet of 12-inch diameter gravity main along MacArthur Drive, south of East Grant Line Road. To mitigate capacity deficiencies under 2040 PWWF conditions, it is recommended that the existing 12-inch diameter gravity main be replaced with a 21-inch diameter gravity main.
- Gravity Main along Lammers Road and Byron Road (WWGM-11): This project includes the replacement of approximately 2,710 feet of 21-inch diameter gravity main along Lammers Road, south of Byron Road, and along Byron Road, west of Lammers Road. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 21-inch diameter gravity main be replaced with a 27-inch diameter gravity main.
- Gravity Main along Corral Hollow Road (WWGM-12): This project includes the replacement of approximately 380 feet of 18-inch gravity main along Corral Hollow Road, between Parkside Drive and project WWLS-2.To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended that the existing 18-inch diameter gravity main be replaced with a 24-inch diameter gravity main.

Future Lift Station and Force Main Improvements

The following lift station and force main improvements are recommended to address future deficiencies.

- Hansen Lift Station Upgrade (Project WWLS-1): This project includes the expansion of Hansen Lift Station. The firm capacity is not adequate to convey the 2040 PWWF. It is recommended that the lift station capacity be upgraded from 3.39 mgd to 10.4 mgd to accommodate future flows.
- Larch Lift Station Upgrade (Project WWLS-3): This project includes the expansion of Larch Lift Station. The firm capacity is not adequate to convey the buildout PWWF. It is recommended that the lift station capacity be upgraded from 15.55 mgd to 17.5 mgd to accommodate future buildout flows.
- Hansen Force Main Upgrade (Project WWFM-2): This project includes the replacement of approximately 6,240 feet of 12-inch diameter force main. To mitigate capacity deficiencies under buildout PWWF conditions, it is recommended the pipeline be replaced with a 16-inch diameter force main to accommodate future flows.

Collection System Expansion to Serve Future Growth

The following recommendations are preliminary sewer trunk alignments and lift stations that will serve future growth. The location of the new trunks and lift stations are conceptual and should be refined as more data becomes available.

- Lammers Projects (WWLS-2, WWFM-1, and WWGM-5): These projects will service future growth in the southern area of the City. Improvements will consist of a lift station, force main, and gravity pipelines. The project will connect into the existing system on Corral Hollow Road. This project is separated into the following segments:
    - WWLS-2 is a lift station that would be required to route flow from Corral Hollow Road to Lammers Road to alleviate the deficiencies along Corral Hollow Road.
    - WWFM-1 consists of approximately 7,790 feet of 14-inch diameter force main located along West Schulte Road from Corral Hollow Road and Lammers Road.
    - WWGM-5 consists of approximately 3,310 feet of 18-inch diameter sewer main located along Lammers Road.
- Gravity Main to Serve Holly Sugar Industrial (WWGM-6): This project includes the addition of approximately 1,520 feet of 12-inch diameter gravity main west of MacArthur drive and south of Arbor Avenue. To anticipate development in this area (Holly Sugar Industrial) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- Gravity Main to Serve Ellis (WWGM-7): This project includes the addition of approximately 1,760 feet of 12-inch diameter gravity main along Ellis Town Drive, between Corral Hollow Road and Middlefield Drive. To anticipate development in this area (Ellis) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- Gravity Main to Serve Rocking Horse and UR7 Bright/Castro (WWGM-8): This project includes the addition of approximately 4,700 feet of 12-inch diameter gravity main along Schulte Road and Mabel Josephine Drive. To anticipate development in this area (Rocking Horse and UR7 Bright/Castro) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- Gravity Main to Serve Avenues and SWC Valpico & Corral Hollow (WWGM-9): This project includes the addition of approximately 2,650 feet of 12-inch diameter gravity main along Valpico Road, west of Corral Hollow Road. To anticipate development in this area (Avenues and SWC Valpico & Corral Hollow) by 2040, it is recommended that these 12- inch diameter pipelines be added.
- Gravity Main to Serve Tracy Village (WWGM-10): This project includes the addition of approximately 1,720 feet of 12-inch diameter gravity main along Valpico Road, east of Corral Hollow Road. To anticipate development in this area (Tracy Village) by 2040, it is recommended that these 12-inch diameter pipelines be added.
- Gravity Main to Serve Chrisman (WWGM-13): This project includes the addition of approximately 5,750 feet of 12-inch diameter gravity main along Paradise Road, south of West Grant Line and along Chrisman

Road, south of Paradise Road. To anticipate development in this area (Chrisman Road) by 2040, it is recommended that these 12- inch diameter pipelines be added.

- Gravity Main to Serve Rocha (WWGM-14): This project includes the addition of approximately 1,420 feet of 12-inch diameter gravity main east of Spur Line Railroad and south of Yosemite Drive. To anticipate development in this area (Rocha) by 2040, it is recommended that these 12-inch diameter pipelines be added.

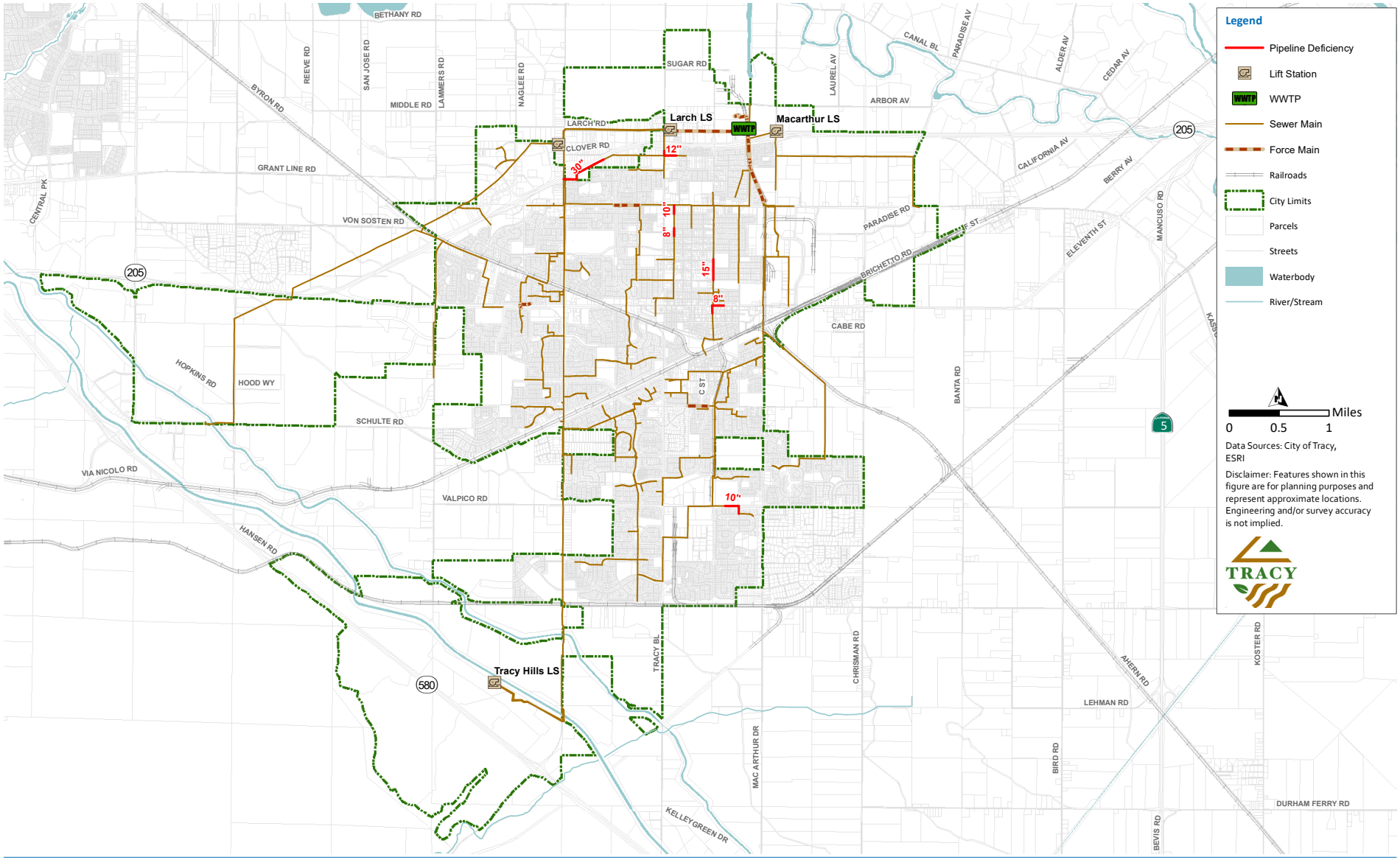
Wastewater Treatment Plan Evaluation and Proposed Upgrades

The WWTP currently treats approximately 9 mgd of average dry weather influent flows. The influent is comprised of both municipal and industrial waste streams, with the primary industrial contributor being Leprino Foods. The treatment facility operates municipal, industrial, and solids treatment processes.

The current WWTP capacity is not sufficient for the existing flows, in particular the outfall and secondary treatment system. However, both the outfall pipeline and secondary treatment system are currently undergoing expansion, which will increase the capacity to meet current influent flows. The Outfall pipeline will increase from 9 mgd to 16 mgd which should provide enough capacity for projected buildout flows. The secondary treatment system will be increased hydraulically by 30 percent, increasing the current capacity of 12.2 mgd to 16.2 mgd in the next few years. The updated hydraulic capacity will provide enough capacity for just under projected buildout flows and provides capacity for approximately 15,350 EDUs of growth. The secondary treatment load capacity will increase by approximately 30 percent as well, increasing from 18,000 ppd of BOD to 24,000 ppd of BOD. This will provide enough capacity for current loading conditions, but by 2040 the loading will exceed the capacity of the secondary clarifiers.

Several processes beyond secondary treatment and the outfall pipeline will require capacity increases before 2040. These processes include an additional aeration basin and secondary, an additional grit basin, an additional circular primary clarifier, addition to the primary sludge pumping station, an additional primary effluent equalization tank, addition to the secondary sludge pump station, an additional anaerobic digester, an additional centrifuge, and an additional sludge drying bed. These recommended updates are recommended based on flow capacity alone, without taking age of existing equipment or maintenance requirements into account.

Assuming all processes included in the Phase 1 Upgrades are upgraded and meet the capacity need of projected buildout flows, the only processes that will require capacity increases before buildout flows are realized are an additional influent screen, addition to the primary effluent equalization pump station, and additional capacity at the outfall. Once again, these recommendations are made on a flow based capacity only.



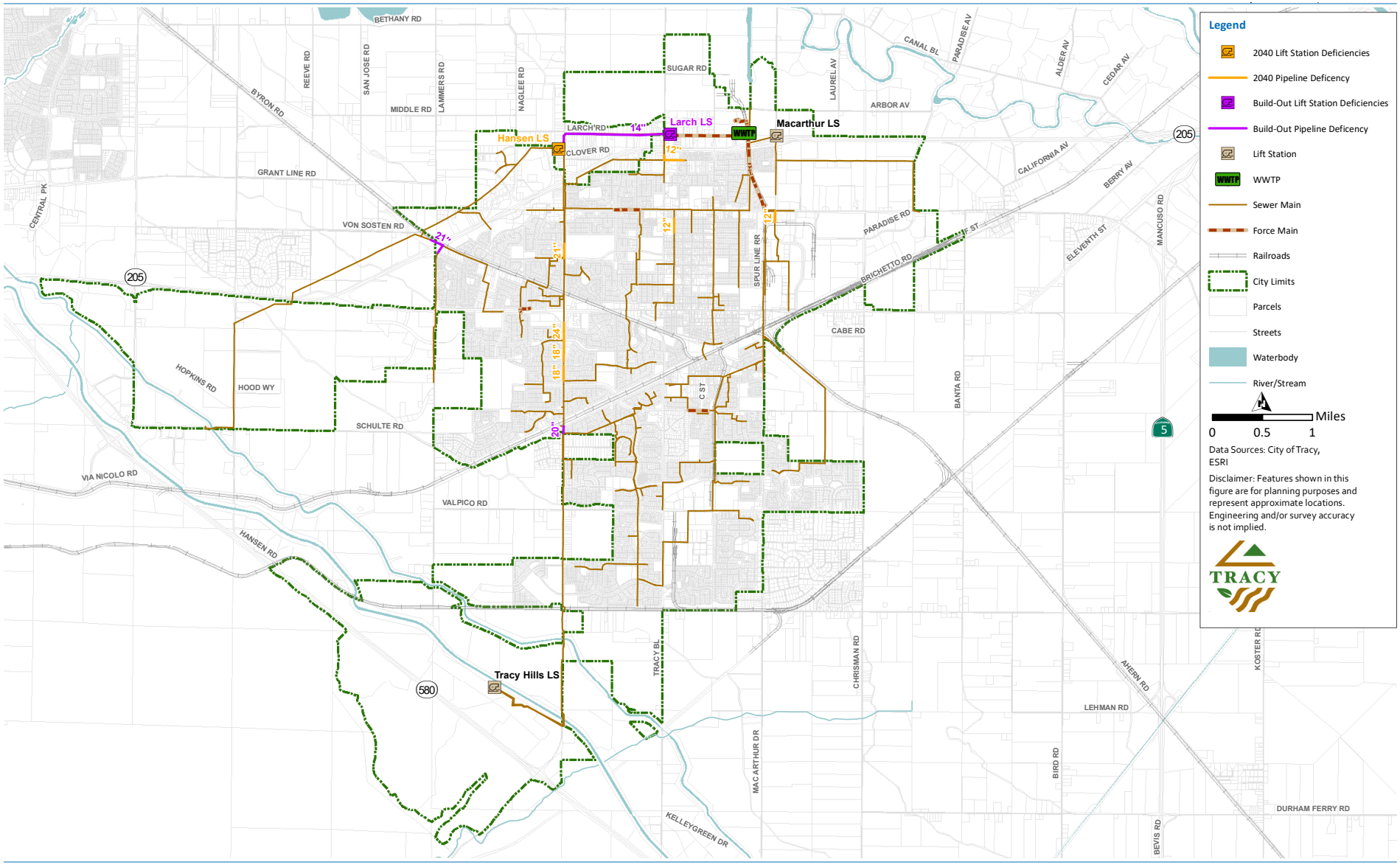
SOURCE: City of Tracy, 2022

Figure 3-1: Existing Wastewater Capacity Deficiencies

WWMP Update
Initial Study

Not to scale

Kimley»Horn



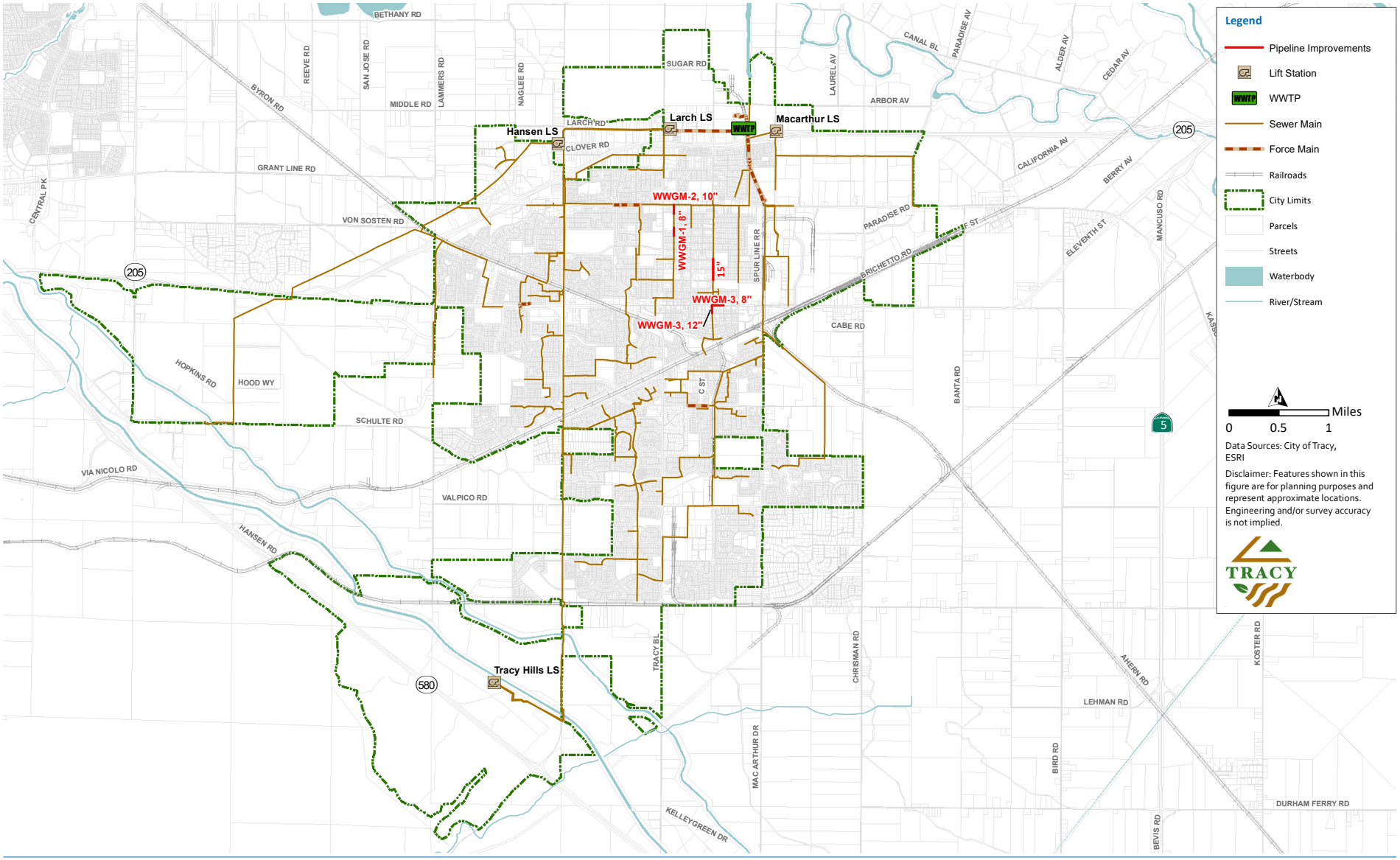
SOURCE: City of Tracy, 2022

Figure 3-2: Future Wastewater Capacity Deficiencies

WWMP Update
Initial Study

Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

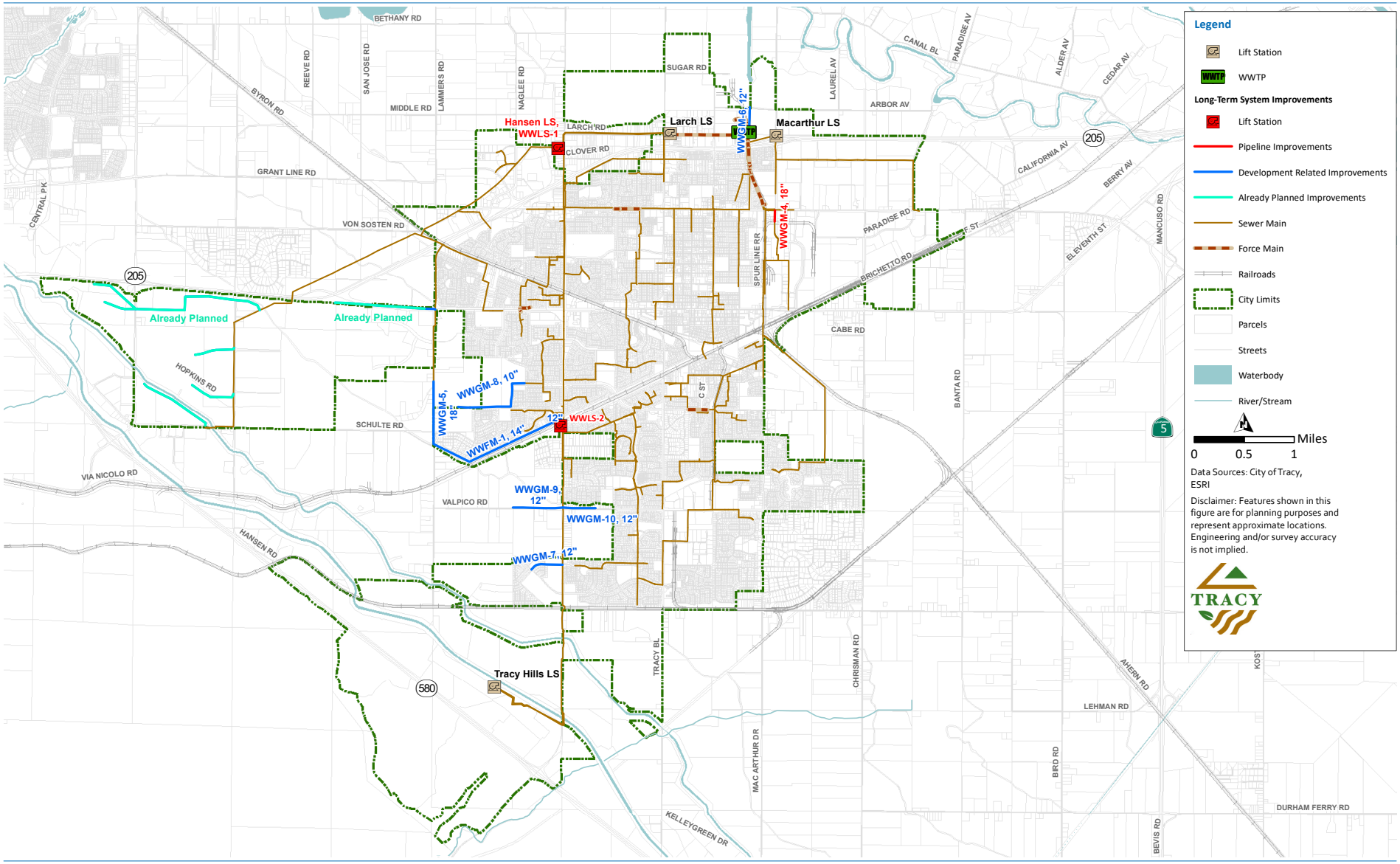
Figure 3-3: Existing System Improvements

WWMP Update

Initial Study

Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

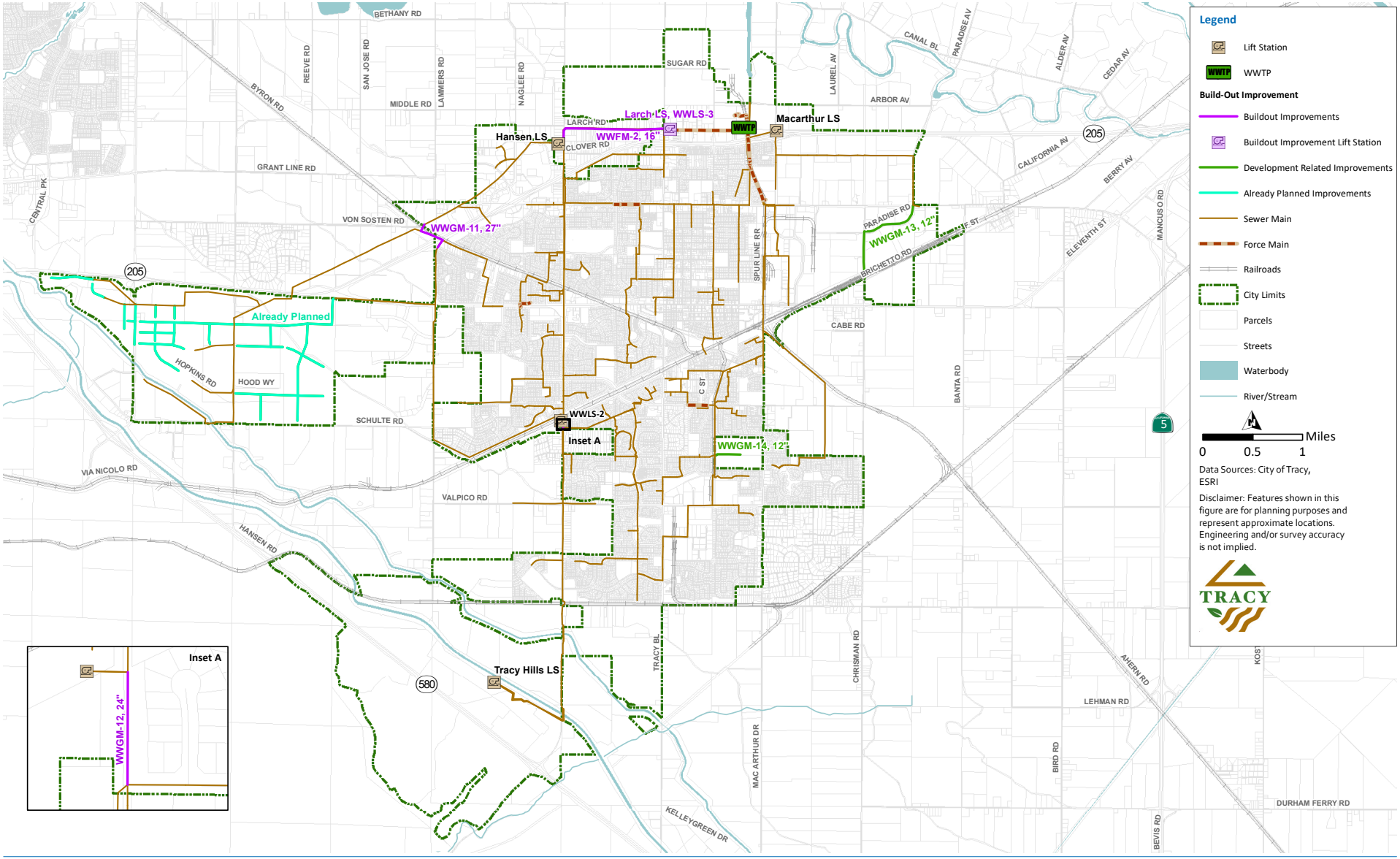
Figure 3-4: 2040 System Improvements

WWMP Update

Initial Study

Not to scale

Kimley»Horn



SOURCE: City of Tracy, 2022

Figure 3-5: Build Out System Improvements

WWMP Update

Initial Study

Not to scale

Kimley»Horn

Section 4.0 **ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below are potentially affected by this Project, involving at least one mitigation measure as indicated by the checklist on the following pages.

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

Section 5.0 **DETERMINATION**

On the basis of this evaluation:

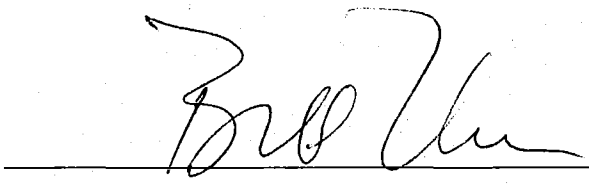
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

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



8/30/22

Signature

Date:

William Dean, Assistant Development Services Director

Section 6.0 **ENVIRONMENTAL EVALUATION**

This section evaluates the potential environmental effects of the proposed Project, as compared to the THSP SEIR, using the environmental checklist from the State *CEQA Guidelines* as amended. The definitions of the response column headings include:

A. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant after the implementation of feasible mitigation measures. The impact may warrant additional analysis within a Subsequent or Supplemental EIR.

B. "Less than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measure has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact."

C. "Less Than Significant Impact" applies where the project creates no significant impacts, only Less than Significant Impacts and no mitigation is required.

D. "No Impact" applies where the project does not create an impact in that category.

I. AESTHETICS

WOULD THE PROJECT:

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building along a State-designated scenic highway?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

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

Less Than Significant Impact. Scenic resources within the City and SOI are associated with open space and agricultural lands, and are a valued asset to the community. The following scenic resources contribute to the Tracy Planning Area's heritage:

- Views of the Diablo Range. Rising from the southwest portion of the Tracy Planning Area, the Diablo Range extends from near sea level to 1,652 feet and provides a visual barrier between the Central Valley and the San Francisco Bay Area. Generally, the eastern slopes visible from Tracy have not been developed and contain sporadic tree groupings.

- Natural Landscapes Surrounding the Paradise Cut, Old River and Tom Paine Sloughs. Located on the north side of the Tracy Planning Area, these landscapes are represented by streamside vegetation that provides visual contrast as they run through the relatively flat agricultural lands.

- Expansive Agricultural Lands. The land surrounding the City contains agricultural lands that are used for row crops and grazing.

- Hillside Areas. Hillside areas, located on the south-western side of the City to the west of I-580, including in the Tracy Hills Specific Plan area, are a visual amenity for residents of the City and travelers on I-580.

- Electricity-Generating Windfarms. Located on the ridgetops west of the City and close to the Altamont Pass, windfarms are visible from Tracy on clear days.

In addition to the scenic resources described above, the General Plan EIR also identifies entry corridors/gateways and scenic routes in the Tracy Planning Area. Entry corridors or gateways provide both visitors and residents with their initial impression of Tracy and a transition from a rural to urban environment. Interstate 580 (I-580) is a major entry corridor to the Central Valley from the Bay Area. Drivers heading west on Interstate 205 (I-205) are provided with views of the surrounding lands and coastal range beyond Tracy to the southwest. There are also numerous gateways into the City from Interstate roadways. These gateways include exits from I-205 on MacArthur Drive, Tracy Boulevard, Grant Line Road and Eleventh Street, and exits from I-580 at Lammers Road and Corral Hollow Road.

The WWMP identifies necessary new infrastructure to serve the City's wastewater needs at buildout of the City's General Plan and future service areas within the City's SOI. Construction and operation of this infrastructure has the potential to impact scenic resources and the overall visual character and quality of some areas within the City and SOI. However, it should be noted that the WWMP is a policy documents and does not propose the construction or operation of wastewater infrastructure projects at this time. Although, its adoption would indirectly facilitate the construction and operation of wastewater infrastructure that could negatively impact scenic vistas, this potential impact would be less than significant for the reasons described below.

Wastewater infrastructure identified by the WWMP includes infrastructure necessary under buildout to serve future growth, mitigated exiting capacity deficiencies, and expand the City's existing WWTP. Improvement would include installation of new or upgraded force mains, lift stations, sewer trunk alignments, and gravity sewer pipelines; upgrades to the MacArthur, Larch, and Hansen Lift Stations. With the exception of expansion of the WWTP and lift stations the majority of infrastructure identified in the WWMP would occur at or below ground level.

During short-term construction activities, view sheds may be temporarily altered by site disturbance, vegetation removal, and the placement of construction equipment, signage and warning markers. However, construction impacts would be temporary in nature and, therefore, would be less than significant. After construction of the identified infrastructure, long distance views of scenic resources could be permanently altered. However, other views of these scenic resources would be available from other areas within the City. Regardless, gravity sewer pipelines and force mains would be placed underground within existing or proposed rights-of-way, or within sewer easements and, thus, would not impact a scenic vista. New and upgraded lift stations would be located above ground and would be visible. As part of the future detailed design of these facilities recommended by the WWMP, the City would require the integration of aesthetic treatments, which would include landscaping requirements to reduce aesthetic impacts. Upgrades to the MacArthur, Larch, and Hansen Lift Stations and infrastructure necessary to expand the City's existing WWTP would be implemented within existing City owned facilities and are not anticipated to be visible improvements that could impact a scenic vista. Therefore, a less than significant impact would occur and no mitigation is required.

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

Less Than Significant Impact. Interstate 580 (I-580) is a state-designated scenic highway that stretches approximately 15 miles from I-5 to SR-205 within the City. The WWMP identifies pipeline improvements in the vicinity of I-205, however they would all be underground and therefore implementation would not substantially damage scenic resources. Additionally, the General Plan EIR did not identify any significant visual resources, including trees, rock outcroppings, or historic buildings within the I-580 corridor. Therefore, a less than significant impact would occur and no mitigation is required.

Threshold (c) In non-urbanized areas, would the project 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?

Less Than Significant Impact. As noted in the General Plan EIR, accommodating all the growth beyond the 20-year planning horizon of the proposed General Plan, will convert all (or nearly all) of the undeveloped land in the City limits and SOI to urban uses. This would alter the overall visual and aesthetic resources in the City, resulting in a significant and unavoidable impact on the existing visual identity and character of the City. Since the infrastructure identified by the WWMP would accommodate growth envisioned for the City by the General Plan beyond the 20-year planning horizon of the General Plan (during the total buildout scenario timeframe), the WWMP would not be expected to result in any greater impacts on the existing visual identity and character of the City than those identified by the General Plan EIR for this resource.

Regarding the potential for the recommended improvements to substantially degrade the existing visual character or quality of their sites and surroundings, refer to Response I (a), above. Impacts would be less than significant.

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

Less Than Significant Impact. Infrastructure improvements proposed by the WWMP would potentially create new sources of light and glare. During construction, job sites would require security lighting and long-term, some above ground infrastructure identified by the WWMP (i.e. lift stations, and capacity improvements to the WWTP) would require security lighting and generate operational light and glare. Both short-term construction and long-term sources of light and glare could adversely affect day or nighttime views in the area.

City Standard Plan #154 establishes minimum requirements for light illumination, but does not have regulations limiting glare. The General Plan EIR determined that the amount of new development envisioned for the City during the General Plan's 20-year development scenario and total buildout scenario would increase light and glare in the City. However, adherence to General Plan Policy P5 under Objective CC-1.1, which requires that lighting on private and public property be designed to provide safe and adequate lighting while minimizing light spillage to adjacent properties, would reduce potential

impacts to less than significant. Given that the infrastructure identified by the WWMP would be necessary during the total buildout development scenario analyzed in the General Plan EIR, impacts associated with the WWMP would not be expected to be any greater than those identified by the General Plan EIR.

Notwithstanding, the City addresses light and glare issues on a case-by-case basis during the development review process and typically adds requirements to shield and protect against light spillover from one property to the next as conditions of project approval. Title 10.08.4000 of the Tracy Municipal Code requires that site plans and architectural design include exterior lighting and devices, and be reviewed by the Community Development Department. Adherence to required City lighting standards would reduce potential impacts to less than significant and no mitigation is required.

Cumulative Impacts

The potential aesthetic impacts related to views, aesthetics, and light and glare are site specific. While impacts are minimized through compliance with City standards, General Plan policies and the City's development review process, impacts related to aesthetics across the City considered cumulatively significant and unavoidable in the General Plan EIR. As identified in the General Plan EIR, the General Plan buildout would change the visual aspect of and views from, to, and across the City, add new development to viewsheds, bring urban development to a rural and agricultural area, resulting in cumulatively considerable contributions to significant impacts on scenic vistas, scenic resources within a State scenic highway, and visual character.

As discussed above, the proposed Project would not cause a new aesthetic impact to occur, nor an increase in the severity of an aesthetic impact previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

II. AGRICULTURAL AND FORESTRY RESOURCES

WOULD THE PROJECT:

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

RESPONSES TO CHECKLIST QUESTIONS

Threshold (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?

Less Than Significant with Mitigation Incorporated. According to the General Plan, there are a total of 41,087 acres of land identified as Prime Farmland, Unique Farmland, Farmland of Statewide Importance

and Farmland of Local Importance within the Tracy Planning Area, SOI and City limits combined. Of this amount, 29,125 acres are located within the Tracy Planning Area outside the SOI, 7,072 acres are within the SOI outside the City limits, and 4,890 acres are located within the City limits. Farmland along the I-580 corridor and the south side of the City is designated as Farmland of Local Importance, which is defined as land of importance to the local economy.

According to the General Plan EIR, despite mitigation programs and supportive policies intended to reduce conversions of farmland and curb impacts on agricultural resources on a larger scale, the permanent loss of farmland that would occur as a result of the amount of growth expected by the General Plan at total buildout would result in a significant and unavoidable impact on agricultural resources. The recommended wastewater infrastructure identified by the WWMP, respectively would be necessary during the total buildout development scenario analyzed in the General Plan EIR and would not be expected to result in any greater loss or conversion of agricultural resources than identified in the General Plan EIR.

The recommended improvements to gravity sewer pipelines and force mains would be placed underground within existing or proposed rights-of-way or within water or sewer easements. Improvements to lift stations and the WWTP are located within City owned facilities and, therefore, would not permanently convert farmland to non-agricultural use. None of these recommended improvements are proposed in an area designated as Agriculture by the General Plan.

As discussed in the General Plan EIR, the City currently uses several regulatory tools for the protection of agricultural resources, including its participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan and an Agricultural Mitigation Fee Ordinance that is used to collect in-lieu fees for impacts from development on agricultural land. These funds will eventually be utilized for the purchase of conservation easements on agricultural lands. Future wastewater infrastructure projects proposed on agricultural land would be subject to these regulatory requirements. More specifically, improvements identified by the WWMP would be required to comply with the requirements of the City's Agricultural Mitigation Fee Ordinance to reduce any potential conversion of farmland to less than significant, as identified below in Mitigation Measure AG-1.

> ***Mitigation Measure AG-1:*** *Prior to issuance of grading permits for any new wastewater infrastructure projects proposed on agricultural land, the City shall pay the appropriate Agricultural Mitigation Fee, in accordance with Chapter 13.28 of the Tracy Municipal Code.*

With implementation of the above mitigation measure, the recommended improvements on conversion of farmland to non-agricultural uses would be less than significant. This would not be a new specific impact or a substantial increase in the severity of an impact that was identified in the General Plan EIR.

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

No Impact. According to the General Plan EIR, despite policies in the General Plan to support and encourage preservation of Williamson Act lands and the voluntary nature of the Williamson Act program, total buildout of the City limits and SOI may result in the significant and unavoidable conversion of

approximately 3,867 acres of land under Williamson Act contracts to urban uses. The recommended improvements to the wastewater infrastructure identified by the WWMP would be necessary during the total buildout development scenario analyzed in the General Plan EIR and would not be expected to result in any greater conversion of Williamson Act lands than identified in the General Plan EIR. As such, no impact would result.

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

No Impact. No land located within the SOI or City limits is currently classified as forest land, timberland, or timberland zoned for production. Therefore, recommended infrastructure improvements identified by the WWMP would not conflict with existing zoning or cause rezoning of any such land. As such, no impact would result.

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

No Impact. Refer to Response II(c), above.

Threshold (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?

Less Than Significant Impact. As described in the General Plan EIR, in spite of County and City policies to help minimize conflicts between agricultural and urban uses and reduce pressure for additional conversion of agricultural land to non-agricultural use, development envisioned by the General Plan at total buildout would result in additional and incompatible urban development adjacent to agricultural uses. This is a significant and unavoidable impact of implementation of the General Plan. The General Plan EIR determined that no additional mitigation is available. The recommended infrastructure improvements identified by the WWMP would accommodate the growth envisioned for buildout of the General Plan. Thus, implementation of the WWMP would not be expected to result in any greater impacts than identified in the General Plan EIR.

As described in Response II(a), above, the majority of proposed improvements would occur within existing rights-of-way or within City owned facilities and would not be located on land designated for agricultural use. Due to the nature of the improvements proposed for on existing agricultural land (pipelines, lift stations, sewer trunks, gravity mains, etc.), it is unlikely that these types of facilities would intensify pressure for additional conversion of agricultural land to non-agricultural use. As such, impacts would be less than significant.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of

the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, with implementation of Mitigation Measure AG-1, the proposed Project would not cause a new impact related to agricultural resources to occur, nor an increase in the severity of an impact related to agricultural resources previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

III. AIR QUALITY

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☒	☐	☐

RESPONSES TO CHECKLIST QUESTIONS

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

No Impact. The proposed Project lies within the central portion of the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the SJVAB and is tasked with implementing programs and regulations required by the federal and State Clean Air Acts. If a project is found to interfere with the region's ability to comply with federal and State air quality standards, local governments then need to consider project modifications or provide mitigation measures to eliminate the inconsistency of the project plans. In order for a project to be considered "consistent" with the latest Air Quality Plan (AQP), the project must be consistent with the goals, objectives, and assumptions in the respective plan to achieve Federal and State air quality standards. Additionally, both construction-related and long-term emissions are required to be quantified and compared to the SJVAPCD significance thresholds.

The infrastructure identified by the WWMP Update would accommodate the anticipated growth from buildout of the General Plan and recent changes in land use development patterns. Air emissions from the WWMP Update would not exceed any SJVAPCD significance thresholds, as discussed below. Thus, implementation of the WWMP is not expected to result in any greater impacts than identified in the General Plan EIR. Therefore, the Project will not impact the implementation of any applicable air quality plan, thus there will be no impact.

Threshold (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?

Less Than Significant with Mitigation Incorporated. Air quality emissions would be generated during operation and construction of the proposed Project. Because of the region's non-attainment status for ozone, PM2.5, and PM10, if project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NOX), PM10, or PM2.5 would exceed the SJVAPCD's significance thresholds, then the proposed Project uses would be considered to conflict with the attainment plans. Discussion of construction and operational-related air quality impacts is provided below.

Construction

Construction activities are a source of fugitive dust (PM_{10}) that may have a substantial, although temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working within the area of individual infrastructure projects. Fugitive dust emissions are associated with land clearing, excavation, cut and fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions.

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from construction sites, emissions produced at the sites as the equipment is used, and emissions from trucks transporting materials to and from the sites. Emitted pollutants would include carbon monoxide (CO), reactive organic gasses (ROG), nitrogen dioxide (NO_X), sulfur dioxide (SO_X), and coarse particulate matter (PM_{10}). Standard SJVAPCD regulations such as maintaining all construction equipment in proper tune and shutting down equipment when not in use for extended periods of time would be required**.**

Control measures are required and enforced by the SJVAPCD under Regulations IV and VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM_{10} fugitive dust rules and equipment exhaust emissions controls are implemented. The proposed Project would be required to comply with all applicable measures from SJVAPCD, including Rules 4201,4202, and 8011 through 8071.

The WWMP identifies the infrastructure necessary to ensure that there are adequate wastewater facilities capable of accommodating the projected wastewater flows under near-term (2025), future (2040) and ultimate General Plan buildout. A specific buildout schedule for identified wastewater facilities has not yet been developed because individual facility construction would occur as needed. Implementation of proposed components of the WWMP would be dependent on increased water demands and wastewater generation within the Tracy Planning Area. However, **Table 6-1**: **Typical** Project **Unmitigated Construction Criteria Pollutant Emissions,** below shows the construction emissions results for a typical wastewater improvement Project that may occur as a result of the WWMP Updates.

Table 6-1: Typical Project Unmitigated Construction Criteria Pollutant Emissions						
Year	**Pollutant (maximum tons per year)[1]**					
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**SO_X**
2025	0.04	0.35	0.44	0.03	0.02	0.00
SJVAPCD Significance Threshold [2]	10	10	100	15	15	27
Exceed SJVAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
1. Emissions were calculated using CalEEMod version 2020.4.0. PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures provided by water trucks as specified. 2. San Joaquin Valley Air Pollution Control District, updated 2015. Source: Refer to the CalEEMod outputs provided in Appendix A, *Air Quality and Greenhouse Gas Modeling Data*.						

The results of the emissions modeling were compared with the SJVAPCD thresholds of significance for criteria pollutant emissions (see **Table 6-1**). The modeled results indicate that construction emissions from a typical wastewater improvement Project from the WWMP Update will not considerably increase any of the criteria pollutants for which the Project region is non-attainment. Nonetheless, the Project shall implement Mitigation Measure AQ-1 described below to ensure short-term construction emissions for individual projects from the WWMP Update would be less than significant.

Mitigation Measure AQ 1: Prior to the issuance of grading permits the contractor for individual infrastructure improvement projects shall submit a construction emission plan to demonstrate to the City of Tracy that demonstrates how construction activities would comply with the following emissions control measures:

- Properly and routinely maintain all construction equipment, as recommended by manufacturer's manuals, to control exhaust emissions.
- Shut down equipment when not in use for extended periods of time, to reduce exhaust emissions associated with idling engines.
- Encourage ride-sharing and use of transit transportation for construction employees commuting to the individual sites.
- Use electric equipment for construction whenever possible in lieu of fossil fuel-fired equipment.
- Curtail construction during periods of high ambient pollutant concentrations.
- Construction equipment shall operate no longer than eight cumulative hours per day.
- All construction vehicles shall be equipped with proper emission control equipment and kept in good and proper running order to reduce NOx emissions.
- On-Road and Off-Road diesel equipment shall use aqueous diesel fuel if permitted under manufacturer's guidelines.

- On-Road and Off-Road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines.
- On-Road and Off-Road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines.
- Use of Caterpillar pre-chamber diesel engines or equivalent shall be utilized if economic and available to reduce NOx emissions.
- All construction activities within the individual sites shall be discontinued during the first stage smog alerts.
- Construction and grading activities shall not be allowed during first stage ozone alerts. First stage ozone alerts are declared when the ozone level exceeds 0.20 ppm (1-hour average).

Operations

Long-term operational emissions would be generated from the day-to-day operations of the buildout of the WWMP facilities. Operation of WWMP facilities would involve two primary activities that would generate air emissions: 1) electricity generation for pressure regulating stations and operations of wastewater treatment plants; and 2) mobile source emissions from employees. Further, long-term electricity and fossil fuels would be necessary in certain instances to operate some of the infrastructure identified by the WWMP (i.e., lift stations, pressure regulating stations, etc.). However, operational emissions from the identified infrastructure would be minimal and would accommodate the City's anticipated growth under the near-term (2025), future (2040), and buildout of the General Plan. Thus, the Project would not be expected to result in any greater impacts than identified in the General Plan EIR and impacts would be less than significant.

Threshold (c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant with Mitigation Incorporated. Sensitive receptors (i.e., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. Development of the wastewater facilities as a result of the Project could result in pollutant emissions from short-term construction activities. However, these emissions would be temporary in nature and would cease upon construction completion. In addition, implementation of Mitigation Measure AQ 1 would ensure that short-term construction impacts are less than significant.

During operations, the infrastructure identified by the WWMP Update (generally consists of existing pipelines, pump stations, pressure regulating stations, and wells, etc.) would not be expected to expose sensitive receptors to substantial pollutant concentrations as this equipment and infrastructure does not typically emit substantial amounts of noxious or hazardous pollutants. Moreover, a great majority of the infrastructure would be constructed below ground. Thus, the improvements identified by the WWMP Update would be expected to result in less than significant impacts in this regard.

Threshold (d) Would the project result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant with Mitigation Incorporated. Construction activities may generate detectable odors from heavy-duty equipment exhaust. Odors associated with diesel and gasoline fumes would occur during the construction phase and may affect residents in the vicinity of individual projects. However, these odors would be temporary in nature and would cease upon the completion of construction. Adherence to Mitigation Measure AQ 1 would reduce potential impacts to less than significant.

Wastewater infrastructure generally does not emit objectionable odors, although by its very nature sewage is an objectionable odor. Thus, during the operational phase, the wastewater infrastructure identified by the WWMP Update would not be anticipated to create objectionable odors in and of itself that could affect a substantial number of people, even though the wastewater infrastructure identified by the WWMP would transport sewage which has an objectionable odor. Consequently, during operation, impacts would be less than significant.

Cumulative Impacts

A project that has a significant impact on air quality with regard to emissions of PM_{10}, $PM_{2.5}$, NO_X and/or ROGs as determined above would have a significant cumulative effect. In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of screening levels identified above, and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions. With regard to past and present projects, the background ambient air quality, as measured at the monitoring stations maintained and operated by the SJVAPCD, reflects the concentrations of pollutants from existing sources. Past and present project impacts are therefore included in the background ambient air quality data.

As discussed above, the proposed Project would not cause a new air quality impact to occur, nor an increase in the severity of an air quality impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Additionally, Mitigation Measure AQ 1 is applicable to the proposed Project and would be expected to reduce the severity of the impact to a less than significant level. Therefore, air quality impacts would not be greater than those previously analyzed. The proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

IV. BIOLOGICAL RESOURCES

WOULD THE PROJECT:

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

RESPONSES TO CHECKLIST QUESTIONS

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

Less Than Significant with Mitigation Incorporated. The recommended wastewater infrastructure improvements are within Tracy Planning Area, which is located within the jurisdiction of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), and the City is an eligible SJMSCP participant. This plan outlines mitigation measures for species and habitats known or likely to occur in the region. The species covered by the SJMSCP were reviewed prior to a reconnaissance field survey and cross referenced with California Natural Diversity Data Base (CNDDB) records to refine a

targeted list of sites that were sampled. Particular attention was given to federally and/or state-listed species, plants considered rare by the California Native Plant Society (CNPS 2010, 2012), protected wildlife, and wildlife species of special concern.

The following ten federal and State endangered and threatened plant and wildlife species have the potential to occur on one or more of the proposed City of Tracy long-term master plans project sites: large-flowered fiddleneck, Conservancy fairy shrimp, longhorn fairy shrimp, vernal pool fairy shrimp, valley elderberry longhorn beetle, California tiger salamander, California red legged frog, giant garter snake, Swainson's hawk, and San Joaquin kit fox. "Take" of one or more of these species could occur during construction of infrastructure facilities throughout the proposed Project area, and would constitute a significant impact under CEQA. However, implementation of the following mitigation measures would facilitate compliance with the SJMSCP and reduce impacts on these species to a less than significant level.

> ***Mitigation Measure BIO-1:*** *Pre-construction surveys shall be conducted by the City (as project proponent) prior to any project-related activities that may impact special status-species identified in Table BIO 1-1 (as per section 5.2.2.1 through 5.2.2.5 of the SJMSCP, Appendix I). If construction activities would result in impacts to any of these species, the mitigation measures specified for that particular species and habitat within Table BIO 1-1 and Table BIO 1-2 shall be implemented.*

Table BIO 1-1: Incidental Take Minimization Measures – FESA and CESA Species

Species	Status	Incidental Take Minimization Measures
Large-flowered fiddleneck (*Amsinckia grandiflora*)	FE, SE, CNPS 1B.1	Pre-construction surveys will need to be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If large-flowered fiddleneck if found, the SJMSCP requires complete avoidance of plant populations onsite in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Conservancy fairy shrimp (*Branchinecta conservatio*)	FE	Delay construction until pools are dry, collect and store soil samples, and conduct pre-construction surveys, as described in Section 5.2.4.4 of the SJMSCP.
Longhorn fairy shrimp (*Branchinecta longiantenna*)	FE	Delay construction until pools are dry, collect and store soil samples, and conduct pre-construction surveys, as described in Section 5.2.4.4 of the SJMSCP.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	Delay construction until pools are dry, collect and store soil samples, as described in Section 5.2.4.4 of the SJMSCP.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	Survey site for presence of elderberry shrubs; if elderberry shrubs present, implement measures in Section 5.2.4.25 of the SJMSCP.
California tiger salamander (*Ambystoma californiense*)	FT, ST	Project implementation could be delayed due to species lengthy presence/ absence surveys at sites indicated. See Sections 5.2.4.5 and 5.2.4.6 of the SJMSCP.

Table BIO 1-1: Incidental Take Minimization Measures – FESA and CESA Species		
Species	**Status**	**Incidental Take Minimization Measures**
California red-legged frog (*Rana draytonii*)	FT, CSSC	Establish a 300-foot setback around occupied habitat, as described in Section 5.2.4.7 of the SJMSCP.
Swainson's hawk (*Buteo swainsoni*)	ST	Retention of nest trees or removal of such trees between September 1 and February 15, as detailed in Section 5.2.4.11 of the SJMSCP.
Giant garter snake (*Thamnophis gigas*)	FT, ST	Full avoidance of giant garter snake known occupied habitat is required. Implement the nine avoidance and minimization measures detailed in Section 5.2.4.25 of the SJMSCP.
San Joaquin kit fox (*Vulpes macrotis mutica*)	FE, ST	Pre-construction surveys prior to commencement of ground disturbance for projects located in the Southwest Zone or Southwest/Central transition Zone, as detailed in Section 5.2.4.1 of the SJMSCP.

Source: City of Tracy Citywide Water System Master Plan/Tracy Wastewater Master Plan Draft Initial Study/CEQA Section 15183 Analysis. RBF Consulting, November 2012.

Table BIO 1-2: SJMSCP Compensation Ratios		
Habitat type converted from open space use	**Required Compensation Ratio**	**Description**
Agricultural Habitat Lands	1:1	One acre of preserve acquired, enhanced and managed in perpetuity for each acre of habitat converted from Open Space use.
Natural Lands - Non-Wetlands (e.g., oak woodlands)	3:1	Three acres of preserve acquired, enhanced and managed in perpetuity for each acre of habitat converted from Open Space use.
Natural Lands - Vernal Pools within Vernal Pool Zone	2:1 Preservation plus 1:1 Creation (3:1 total)	Create one acre of habitat and preserve two acres of existing habitat for each acre converted from Open Space use resulting in three total acres of preserve. Preserves include both wetted surface area and upland grasslands surrounding vernal pools and protecting their watersheds. Creation component shall emphasize restoration of pre-existing vernal pools, wherever feasible.
Natural Lands - Wetlands Other than Vernal Pools	At least 1:1 Creation Plus 2:1 Preservation (3:1 total)	SJMSCP may: (1) create one acre habitat, preserve two existing acres of habitat; (2) create two acres habitat, preserve one acre existing habitat; or (3) create three acres of habitat, preserve zero acres of existing habitat. All options result in three acres of preserve.

Source: City of Tracy Citywide Water System Master Plan/Tracy Wastewater Master Plan Draft Initial Study/CEQA Section 15183 Analysis. RBF Consulting, November 2012.

Future infrastructure development facilitated by the WWMP Update could have the potential to result in loss of habitat of federal and State endangered and threatened plant and wildlife species covered under the SJMSCP. Losses of habitat occupied by any these species would constitute a significant impact under CEQA. However, implementation of the following mitigation measures would reduce impacts to these species to less than significant levels and fully comply with the SJMSCP.

> ***Mitigation Measure BIO-2:*** *Incidental take minimization measures shall be completed per the requirements of the SJMSCP, as outlined in Table BIO 1-2, above. Implementation of these measures would reduce the potential of take of federal and state endangered and threatened wildlife species to less than significant levels and fully comply with the SJMSCP.*
>
> ***Mitigation Measure BIO-3:*** *Under the SJMSCP, mitigation for loss of habitat of federal and state endangered and threatened plant and wildlife species allows for a fee based approach based on the habitat type that is to be converted from open space uses. The fee structure for 2022 is as follows, and updates annually:*
>
> *A. $9,781 per acre for Conversion of Multi-Purpose Open Space Lands*
>
> *B. $19,561 per acre for Conversion of Agricultural Habitat Lands and Natural Lands (except for vernal pools)*
>
> *C. $174,040 per acre for the wetted surface area of vernal pools and $80,453 per acre for the upland grasslands surrounding vernal pools. The SJMSCP assumes a 12 percent wetted surface area for vernal pool grasslands.*

The following 23 state species of special concern, state fully protected, and other SJMSCP covered plant and wildlife species have the potential to occur on one or more of the proposed City of Tracy long-term master plans project sites:

- Slough thistle
- diamond-petaled California poppy
- showy golden madia
- caper-fruited tropidiocarpum
- midvalley fairy shrimp
- western spadefoot
- western pond turtle
- San Joaquin coachwhip
- coast horned lizard
- burrowing owl
- Cooper's hawk
- western grebe
- tricolored blackbird
- short-eared owl
- northern harrier
- white-tailed kite
- California horned lark
- loggerhead shrike
- western mastiff bat
- western red bat
- long-eared myotis
- Yuma myotis
- American badger

While the WWMP is not proposing construction or operation of specific wastewater infrastructure projects at this time, the potential for injury or mortality of one or more of these species could occur

during construction of infrastructure facilities throughout the Project area when these activities commence. Injury or mortality of significant numbers of individuals of species of special concern, state fully protected, and other SJMSCP-covered species would constitute a significant impact under CEQA. However, implementation of Mitigation Measure BIO-1 through BIO-3 above, in addition to the following mitigation measures, would reduce impacts to these species to less than significant levels and fully comply with the SJMSCP.

> ***Mitigation Measure BIO-4:*** *Incidental take minimization measures shall be completed per the requirements of the SJMSCP, as outlined in Table BIO 4-1 below. Implementation of these measures would reduce the potential of injury or mortality of state species of special concern, state fully protected, and other SJMSCP-covered wildlife species to less than significant levels and fully comply with the SJMSCP.*

Table BIO 4-1: Incidental Take Minimization Measures – CSSC, State Fully Protected and SJMSCP Covered Species

Name	Status	Incidental Take Minimization Measures
Slough thistle (*Cirsium crassicaule*)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If slough thistle is found, complete avoidance of plant populations on site is required in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Diamond-petaled California poppy (*Eschscholzia rhombipetala*)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If diamond-petaled California poppy is found, complete avoidance of plant populations on site is required in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Showy golden madia (*Madia radiate*)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If showy golden madia is found, complete avoidance of plant populations on site is required in accordance with the identified measures in Section 5.5.2.1 and 5.5.9(F).
Caper-fruited tropidiocarpum (*Tropidiocarpum capparideum*)	CNPS 1B.1	Pre-construction surveys shall be performed as detailed in Section 5.2.2.1(A, B, and D) and 5.2.2.2 through 5.2.2.5 of the SJMSCP. If caper-fruited tropidiocarpum is found, Section

Table BIO 4-1: Incidental Take Minimization Measures – CSSC, State Fully Protected and SJMSCP Covered Species		
Name	**Status**	**Incidental Take Minimization Measures**
		5.2.4.29C of the SJMSCP specifies acquisition or consultation measures required.
Midvalley fairy shrimp (*Branchinecta mesovallensis*)	SJMSCP	Delay construction until pools are dry, collect and store soil samples, as described in Section 5.2.4.4 of the SJMSCP.
Western spadefoot (*Spea hammondii*)	CSSC	Conduct species surveys in accordance with current Technical Advisory Committee (TAC)-approved protocol, as described in sections 5.2.4.5 and 5.2.4.6 of the SJMSCP.
Western pond turtle (*Actinemys marmorata*)	CSSC	300-400 foot buffer area required from known nesting sites, as described in Section 5.2.4.10 of the SJMSCP.
San Joaquin coachwhip (whipsnake) (*Masticophis flagellum ruddocki*)	CSSC	Incidental take measures to be formulated by TAC if discovered on a project site, as described in Section 5.2.4.10 of the SJMSCP.
Coast (California) horned lizard (*Phrynosoma blainvillii*)	CSSC	Incidental take measures to be formulated by TAC if discovered on a project site, as described in Section 5.2.4.10 of the SJMSCP.
Burrowing owl (*Athene cunicularia*)	CSSC	Allow growth of vegetation onsite to a height of 36 inches prior to construction, disk site to prevent colonization by owls, or evict resident owls, if present, as detailed in Section 5.2.4.15 of the SJMSCP.
Cooper's hawk (*Accipiter cooperii)*	SJMSCP	Establish 100-foot setback from nesting areas, as described in Section 5.2.4.19 of the SJMSCP.
Western grebe (*Aechmophorus occidentalis*)	SJMSCP	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
Tricolored blackbird (*Agelaius tricolor*)	CSSC	Avoid breeding colonies whenever possible. Otherwise, establish a 500-foot buffer during the nesting season, as described in Section 5.2.4.16 of the SJMSCP.
Short-eared owl (*Asio flammeus*)	CSSC	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.

Table BIO 4-1: Incidental Take Minimization Measures – CSSC, State Fully Protected and SJMSCP Covered Species		
Name	**Status**	**Incidental Take Minimization Measures**
Northern harrier (*Circus cyaneus*)	CSSC	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
White-tailed kite (*Elanus leucurus*)	SP	Conduct pre-construction surveys, as described in Section 5.2.4.19 of the SJMSCP.
California horned lark (*Eremophila alpestris actia*)	SJMSCP	Establish a 500-foot setback from nesting areas during the nesting season, as described in Section 5.2.4.17 of the SJMSCP.
Loggerhead shrike (*Lanius ludovicianus*)	CSSC	Establish a 100-foot setback from nesting areas, as described in Section 5.2.4.16 of the SJMSCP.
Western mastiff bat (*Eumops perotis californicus*)	CSSC	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
Western red bat (*Lasiurus blossevillii*)	CSSC	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
Long-eared myotis (*Myotis evotis*)	SJMSCP	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
Yuma myotis (*Myotis yumanensis*)	SJMSCP	Remove colonial roosting trees only outside the nursery/hibernation season and only after dusk, as described in Section 5.2.4.28 of the SJMSCP.
American badger (*Taxidea taxus*)	CSSC	Monitor occupied dens and destroy only when burrow is unoccupied; establish a 200-foot buffer around natal dens, as described in Section 5.2.4.26 of the SJMSCP.

Source: City of Tracy Citywide Water System Master Plan/Tracy Wastewater Master Plan Draft Initial Study/CEQA Section 15183 Analysis. RBF Consulting, November 2012.

The following plant species are not covered in the SJMSCP:

- California androsace
- big tarplant
- round-leaved filaree
- Lemmon's jewelflower
- Parry's red tarplant
- gypsum-loving larkspur
- hogwallow starfish

These species could be directly affected during construction of infrastructure facilities throughout the project area. Implementation of Mitigation Measure BIO-3 would reduce the potential impact on these species to a less than significant level. If any of the CNPS-listed plant species are found within or directly adjacent to the proposed work area, the Project proponent would implement Mitigation Measure BIO-5, which requires a species-specific determination of potential significance would be conducted for each plant species by a qualified plant ecologist to determine whether Project activities would result in the loss of:

> (a) suitable habitat for less than five percent of the known individual plants of the species documented as occurring within 50 miles of the impact location, if known; or,
>
> (b) less than five percent of the known populations of the species if the total number of individuals is unknown, then impacts would be deemed less than significant and no further mitigation measures would be required. This impact would be considered less than significant because regional populations would remain abundant following Project implementation and the Project would not substantially reduce the number or range of these species.

If Project activities would result in loss of habitat for more than five percent populations or individuals of these species regionally documented as occurring within 50 miles of the impact location, the Project proponent would be required to implement Mitigation Measures BIO-6 and BIO-7.

It is likely that if found, impacts to small populations of List 4 species would be considered less than significant. These plant species are widely distributed, with many known, extant populations occurring in many counties. In other cases, the species are considered to be rarer but the amount of suitable habitat present on site is limited, meaning that any potentially present populations are likely to be small in size and therefore impacts to these would likely also be less than significant. However, impacts to populations of more restricted, rare, or declining species are likely to be considered significant unless mitigated. Finally, for those species that have a potential to occur on site as a large population due to the abundance of potentially suitable habitat on site, impacts to a large population of so-called "watch-list" (i.e., CNPS List 3 and 4) species may be considered significant unless mitigated.

> ***Mitigation Measure BIO-5:*** *WWMP Update project sites shall be surveyed for special status plant species in a year with rainfall totals within the normal range for the area. Surveys shall be floristic in nature and be conducted in accordance with the most current USFWS, CDFG, and CNPS guidelines. Surveys shall cover all areas intended for both development and compensatory mitigation.*

Mitigation Measure BIO-6: *Potentially significant impacts to special status plants shall be avoided to the extent feasible. In consultation with a plant ecologist, the project shall, to the extent feasible, be redesigned, constructed, and operated to reasonably avoid direct and indirect impacts to special status plant populations.*

Mitigation Measure BIO-7: *To compensate for permanent impacts to special-status plant species, habitat that is not already public land shall be preserved and managed in perpetuity at a 1:1 mitigation ratio (one acre preserved for each acre impacted). Impacts could include direct impacts resulting from loss of habitat or indirect impacts if a significant population or portion thereof is unable to be avoided. The preserved habitat for significantly impacted plant species shall be of equal or greater habitat quality to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and dominant species composition, and shall contain verified extant populations of the special-status species impacted. The permanent protection and management of mitigation lands shall be ensured through an appropriate mechanism, such as a conservation easement or fee title purchase. A conservation easement could be held by CDFG or an approved land management entity and shall be recorded within a time frame agreed upon by CDFG.*

The proposed WWMP Project sites would potentially result in losses of habitat for state species of special concern, state fully protected, other SJMSCP-covered wildlife species, and CNPS listed plant species covered under the SJMSCP. Losses of habitat occupied by any of these species could constitute a significant impact under CEQA. However, implementation of Mitigation Measures BIO-1 through BIO-7 (above) would compensate for losses of habitat of state species of special concern, state fully protected, other SJMSCP-covered wildlife species, and CNPS listed plant species to less than significant levels and fully comply with the SJMSCP.

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

Less Than Significant Impact with Mitigation Incorporated. Ephemeral drainages are located throughout the City and its SOI and could occur within future Project sites facilitated through the WWMP Update. Future site-specific surveys would be required to determine whether these features meet the definition of a stream and fall under the California Department of Fish and Game (CDFG) jurisdiction. These features, in addition to all canals, ditches, and other irrigation features may qualify as "waters of the state", in which case, would be subject to regulation by the Regional Water Quality Control Board. The CDFG maintains a "no net loss" policy related to wetlands. As the proposed Project would be within the footprint of the City and its SOI, construction activities that impact areas defined as "wetlands" may be considered significant under CEQA. However, Mitigation Measure BIO-3 identified above and the following Mitigation Measure BIO-8 would reduce impacts to this habitat to a less than significant level.

Mitigation Measure BIO-8: *Pre-construction surveys shall be conducted prior to any project related activities that may encroach into regulated habitats or disturb native vegetation to identify significant impacts. If regulated habitats are impacted by project activities planned activities can*

either avoid these resources or work in conjunction with the regulatory agencies to minimize, mitigate, and permit the activities. A Streambed Alteration Agreement typically can be obtained within 90 days of submittal of a complete application, including a permit fee. Project activities that reduce the cross-sectional area of a stream and/or remove riparian and wetland vegetation require compensatory mitigation and monitoring. Moreover, CDFG agreements for projects in agricultural and native settings frequently include pre-construction surveys and reporting and construction monitoring to ensure protection of wildlife resources. Activities that result in impacts to waters of the state, may require that the project applicant file a Report of Waste Discharge with the Regional Board.

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

Less Than Significant Impact with Mitigation Incorporated. A detailed wetland delineation was not conducted on any of the City of Tracy Infrastructure Master Plans project sites. While a review of the United States Fish and Wildlife Service Wetlands Geodatabase[1] indicated the presence of several potential jurisdictional wetlands near the project area, none occurred within any of the City of Tracy Infrastructure Master Plans project sites that were visited during the reconnaissance surveys of the Project area.

The Delta Mendota Canal and the California Aqueduct are two waterways that cross the Tracy Planning Area and may be subject to the jurisdiction of the United States Army Corp of Engineers (USACE). However, the recommended infrastructure improvements are unlikely to affect these canals. These canals are maintained on an annual basis and are dry for a significant part of the year. Based on prior experience with similar features and on field characteristics encountered in the Project area, the Biotic Resources Report prepared for the 2012 Master Plan Update determined that these lateral canals and ditches do not represent habitats within the regulatory jurisdiction of the USACE. Project activities within these locations are unlikely to affect jurisdictional waters. The streams and potential wetlands located within the Tracy Hills area and the northern region of the Project area are likely subject to the jurisdiction of the USACE. Therefore, the following avoidance and mitigation measure would be implemented to reduce the potential impacts to wetlands to a less than significant level.

Mitigation Measure BIO-9: *Section 5.6 of the SJMSCP states that until such time that the Clean Water Act regional general permit or its equivalent is issued for coverage under the SJMSCP, acquisition of a Section 404 permit by the City (as project proponent) will continue to occur as required by existing regulations. Project proponents shall comply with all requirements for protecting federally protected wetlands.*

[1] (http://wetlandsfws.er.usgs.gov/wtlnds/launch.html)

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

Less Than Significant Impact with Mitigation Incorporated. The recommended improvements to the WWMP Project sites are sufficiently small and widely dispersed such that no substantial interference with native wildlife movements or corridors would occur as a result of any individual Project.

Projects in which nursery sites could be impacted are addressed in impact discussions associated with take of federal and state endangered and threatened wildlife species and injury or mortality of state species of special concern, state fully protected, and other SJMSCP-covered wildlife species in threshold (a), above. Species with the potential to have nursery sites at individual WWMP Update Project sites are identified in **Table BIO 4-1**. However, implementation of Mitigation Measures BIO-1 through BIO-4 would incorporate the implementation of the relevant incidental take minimization measures detailed in the SJMSCP. Implementation of these Mitigation Measures would reduce impacts to nursery sites to less-than-significant levels and fully comply with the SJMSCP.

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

Less Than Significant. The City has a tree ordinance (Tracy Municipal Code [TMC] (Chapter 7.08) that protects "street trees" planted within rights-of-way or planting easements. Any infrastructure projects identified by the WWMP would be required to adhere to the rules and regulations set forth in TMC Chapter 7.08 Therefore, impacts would be less than significant.

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

Less Than Significant Impact with Mitigation Incorporated. The entire Project area is located within the jurisdiction of the SJMSCP. The implementation of Mitigation Measures BIO-1 through BIO-9 described above would ensure that any potential impacts to special-status species or habitats, which may be associated with implementation of the WWMP, are addressed accordingly to the provisions of the SJMSCP. Therefore, the WWMP would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, including the SJMSCP.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to biological resources to occur, nor an increase in the severity of a biological impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed

in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

V. CULTURAL RESOURCES

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

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

Less Than Significant with Mitigation Incorporated. Historic resources generally consist of buildings, structures, improvements, and remnants associated with a significant historic event or person(s) and/or represent a historically significant style, design, or achievement. Damage to or demolition of such resources is typically considered a significant impact. Direct impacts on historic resources can occur through their destruction or removal and indirect impacts can occur from a change in the setting of a historic resource.

According to the General Plan EIR, policies and guiding mechanisms in the General Plan would reduce potential impacts on cultural resources, including historic resources that could occur as a result of total buildout of the General Plan to less than significant. The infrastructure identified by the WWMP would be necessary during the total buildout development scenario analyzed in the General Plan EIR for this resource. As such, when specific infrastructure identified by the WWMP is proposed for construction and operation, it would be expected to result in less than significant impacts on historic resources through the implementation of policies and guiding mechanisms identified in the General Plan.

No facilities associated with WWMP are proposed in areas that currently contain known historic resources. However, during construction, unknown and/or undocumented historic resources may be uncovered. With implementation of Mitigation Measure CR-1, impacts would be reduced to a less than significant.

> ***Mitigation Measure CR-1:*** *In accordance with the requirements of Tracy General Plan Community Character Element Objective CC-3.1, Policy P4 and P5 if any resources are found during construction, all operations within the project area shall halt until an assessment can be made by a qualified archaeologist and Native American monitors regarding the presence of historic resources and the potential for adverse impacts on these resources. Any cultural resources on public or private property shall be either preserved on their sites or adequately documented and conserved as a condition of*

removal. If any resources are found unexpectedly during development, construction shall cease immediately until accurate study and conservation measures are implemented. Measures such as fencing the area immediately surrounding the find, establishing a buffer area, and demarcating the site as an "environmentally sensitive area," could be implemented as part of a resource protection plan that shall be developed to ensure protection of the resource.

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

Less Than Significant with Mitigation Incorporated. Archaeological sites are locations that contain resources associated with former human activities, and may contain human skeletal remains, waste from tool manufacture, tool concentrations, and/or discoloration or accumulation of soil or food remains. The Tracy Planning Area contains known archaeological sites and likely contains undiscovered archaeological sites as well, particularly in undeveloped areas.

As described above, the General Plan EIR concluded that impacts on cultural resources resulting from total buildout of the General Plan would be reduced to less than significant with adherence to policies and guiding mechanisms identified by the General Plan. These policies and guiding mechanisms address potential impacts on archaeological resources. The infrastructure identified by the WWMP would be necessary during the total buildout development scenario timeframe analyzed in the General Plan EIR for this resource. Therefore, implementation of the WWMP would not be expected to result in any greater impacts on cultural resources than those identified by the General Plan EIR.

Construction activities associated with implementation of the proposed WWMP facilities may result in adverse effects on unknown archaeological sites. Implementation of Mitigation Measure CR-2 and CR-3 would reduce potential impacts to less than significant.

Mitigation Measure CR-2: *Prior to the issuance of a grading permit for individual infrastructure projects, an archaeological resource monitoring plan shall be developed by a qualified archaeologist and submitted to the City for review and approval. This plan shall include a grading observation schedule to be maintained when grading occurs on and offsite in upper soils to identify and further evaluate cultural resources that may be discovered in the Project area. A qualified archaeologist and Native American monitors from culturally affiliated Native American Tribes shall be retained and invited, respective, to attend pre-grade meetings and to monitor earth moving activities, including clearing, grubbing, cutting, and trenching at the site. The archaeologist and Native American monitors shall carefully inspect these areas to assess the potential for significant prehistoric or historic remains. If potential archaeological and historical resources are uncovered, the construction contractor shall cease grading operations in the vicinity of the find until further evaluation is undertaken to assess the discovery. Further subsurface investigation may be needed if the resource is determined unique or important for its prehistoric or historic information. Additional investigations will be conducted by a qualified archaeologist in consultation with Native American representative(s) from the culturally affiliated Native American Tribe(s).*

Mitigation Measure CR-3: *Prior to commencement of any ground disturbing activities, the Lead Archaeologist, in consultation with the Native American monitor(s) from culturally affiliated Native American Tribes, shall prepare Cultural Resources Sensitivity Training materials to be used in orientation program given to all personnel working on the proposed project. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.*

Threshold (c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact. Ground-disturbing activities, such as grading or excavation, have the potential to disturb human remains. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. The Native American Graves Protection and Repatriation Act (NAGPRA) includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional and inadvertent discovery of Native American cultural items on federal and tribal lands, and penalties for noncompliance and illegal trafficking. California Public Resources Health and Safety Code Section 7050.5-7055 describes the general provisions regarding human remains, including the requirements if any human remains are accidentally discovered during excavation of a site.

The General Plan EIR found that compliance with policies and guiding mechanisms identified in the General Plan would reduce any impacts on human remains associated with buildout of the General Plan to less than significant. Given that the infrastructure identified in the WWMP would occur within the buildout timeframe and footprint of the General Plan, the WWMP would not be expected to result in any greater impacts on human remains than identified in the General Plan EIR.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to cultural resources to occur, nor an increase in the severity of an impact related to cultural resources previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

VI. ENERGY

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☒	☐	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (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?

Less Than Significant with Mitigation Incorporated. Construction of the WWMP Update facilities would consume energy primarily from fuel consumed by construction vehicles and equipment. Fossil fuels used for construction vehicles and other equipment would be used during site clearing, grading, paving, and building. Fuel consumed during construction would be temporary in nature and would not represent a significant demand on available fuel. There are no unusual characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or State.

Additionally, Project-related design features and mitigation measures would provide fuel and energy reduction during construction. Overall fuel and energy reductions are difficult to quantify; however, certain air quality emission reduction measures would also reduce fuel and electricity use during construction of the WWMP facilities. Mitigation Measure AQ-1 would reduce energy consumption by requiring the contractor to minimize equipment idling time. Additionally, all diesel-fueled construction vehicles would be required to meet the latest emissions standards. These measures would further reduce fuel and energy use during all stages of construction and avoid the wasteful, inefficient, or unnecessary consumption of fuel energy. Therefore, construction of the WWMP facilities would not result in inefficient, wasteful, or unnecessary consumption of fuel energy as it would comply with relevant standards, and implementation of Mitigation Measure AQ-1.

Implementation of the WWMP Update would not induce substantial growth and would not result in significant generation of construction or operational energy usage. During operation, energy consumption and maintenance proposed by the WWMP Update would involve the same usage and activities as the existing pipelines, gravity mains, lift stations, force mains, etc. The wastewater infrastructure and equipment would directly consume a minimal amount of energy and would comply with the State's most current energy efficiency standards. In addition, the capacity improvements to the WWTP facilities would

generate nominal vehicle trips and not increase fuel consumption. Therefore, operation of the WWMP facilities would not result in inefficient, wasteful, or unnecessary consumption of fuel energy. Impacts would be less than significant in this regard.

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

Less Than Significant Impact. As discussed above, the Project would not result in inefficient, wasteful, or unnecessary consumption of energy. Therefore, the Project would not conflict with or obstruct any State or local plans for renewable or energy efficiency. A less than significant impact would occur.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new energy impact to occur, nor an increase in the severity of an energy impact previously identified in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

VII. GEOLOGY AND SOILS

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
Would the project:				
a. 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.	☐	☒	☐	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv. Landslides?	☐	☒	☐	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☒	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (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.

Less Than Significant with Mitigation Incorporated. The General Plan EIR identified potential risks

associated with ground and earthquake fault rupture in the southwest portion of the Tracy Planning area for developments within the buildout timeframe of the General Plan. While the suggested infrastructure improvements do occur in this timeframe, the implementation of WWMP recommendations are not anticipated to result in any greater impact than detailed in the General Plan EIR.

Some of the identified infrastructure related to the buildout will be located near the southwest portion of the Tracy Planning Area. As a result, any individual wastewater infrastructure projects proposed in this area would be subject to Mitigation Measure GEO-1. This requires the preparation of site-specific design-level geotechnical investigations pursuant to General Plan Safety Element Policy Objective SA-1.1, P2, which requires that geotechnical engineering studies be undertaken for any development in areas where potentially serious geologic risks exist.

> ***Mitigation Measure GEO-1:*** *In accordance with the requirements of Tracy General Plan Objective SA-1.1, Policy 1, potential for geological hazards shall be addressed in design-level geotechnical engineering investigations. The Development and Engineering Services Department shall ensure that all appropriate measures are implemented in order to reduce the risk of geological hazards prior to the issuance of a grading permit.*

ii. Strong seismic ground shaking?

Less Than Significant Impact. According to the General Plan EIR, data from the State Department of Conservation and the U.S. Geological Survey indicate that there are six faults in the Tracy Planning Area, all considered inactive. The City has a low to moderate seismic history as well. However, the City has the potential to experience ground shaking caused by seismic activity on nearby major active faults, which have historically been the source of earthquakes felt in Tracy.

The General Plan EIR analyzed the seismic ground shaking risks associated with buildout of the General Plan and found risks would be less than significant with compliance with the latest California Uniform Building Code (UBC) standards and policies identified in the General Plan. The infrastructure identified by the WWMP would be required to comply with the latest UBC, as required by the City Municipal Code 9.04.030, which would reduce risks associated with seismic ground shaking to the maximum extent practicable. Additionally, the infrastructure identified by the WWMP would be necessary during the buildout timeframe of the General Plan. As such, the infrastructure identified by the WWMP would be at no greater risk from seismic ground shaking than what was identified in the General Plan EIR. There would be a less than significant impact associated with strong seismic ground shaking.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant with Mitigation Incorporated. The General Plan EIR states that the potential risk of liquefaction for developments in the General Plan buildout timeframe would be reduced to less than significant through the implementation of General Plan Safety Element Policy Objective SA-1.1, P2, which requires that geotechnical engineering studies be undertaken for any

development in areas where potentially serious geologic risks exist. Given that the infrastructure identified by the WWMP would be implemented during the total buildout development scenario outlined in the General Plan EIR, impacts associated with the WWMP would not be expected to be any greater than those identified by the General Plan EIR. Regardless, individual wastewater infrastructure projects identified by the WWMP would be required to implement General Plan Safety Element Policy Objective SA-1.1, P1, as identified in Mitigation Measure GEO-1 above, which would reduce the potential risk of liquefaction. Any potential impact from liquefaction is, therefore, considered to be less than significant with incorporation of Mitigation Measure GEO-1.

iv. Landslides?

Less Than Significant with Mitigation Incorporated. The General Plan EIR determined that buildout would not result in significant risk of landslides or ground failure, given the relatively flat nature of the City. However, limited potential for risk exists in the foothills and mountain terrain of the upland areas in the southwest and the potential for small scale slope failures along river banks also exists. The identified WWMP wastewater infrastructure recommendations are necessary to accommodate the growth envisioned by the General Plan at buildout and are consistent with the timeframe analyzed by the General Plan EIR for this resource. Thus, the infrastructure identified by the WWMP would not be expected to result in any greater impacts than identified in the General Plan EIR.

There are no WWMP facilities proposed within hilly areas where erosion could happen. Furthermore, implementation of Mitigation Measure GEO-1, identified above, would further reduce any potential landslide risk to less than significant.

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

Less Than Significant with Mitigation Incorporated. As described by the General Plan EIR, the majority of Tracy is on flat land with little risk of erosion but there is potential for the loss of topsoil with any development that occurs on hillsides because removal of vegetation can increase erosion. The General Plan EIR concluded that the implementation of the General Plan would not result in significant topsoil and erosion impacts. There are no WWMP facilities proposed within hilly areas where erosion could happen.

The infrastructure recommendations identified in the proposed WWMP facilitate the construction and operation of improvements and expansions that could result in soil erosion or the loss of topsoil. Erosion would be controlled using standard construction practices, based on a site-specific geotechnical study as required by Mitigation Measure GEO-1. Implementation of this measure would ensure that impacts associated with construction related soil erosion would be less than significant.

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

Less Than Significant with Mitigation Incorporated. Refer to responses VII (a)(ii-iv), above.

Threshold (d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant with Mitigation Incorporated. Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when wet or shrinking when dry. Expansion is a characteristic of clay type soils. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements.

The General Plan EIR identified that the City has a moderate to high risk for expansive soils, depending on the location and soil type. The General Plan EIR concluded that the risk for exposure to expansive soils would increase as a result of implementation of the General Plan, but that this risk could be mitigated to less than significant by compliance with General Plan policy Objective SA-1.1, P2, which requires geotechnical reports for all development proposed in areas with risk of geological hazard.

The wastewater infrastructure improvements recommended by the WWMP Update would support General Plan buildout and would be expected to result in no greater impacts than identified in the General Plan EIR. Individual projects would be required to comply with General Plan policy Objective SA-1.1, P2, as identified by Mitigation Measure GEO-1 and Mitigation Measure GEO-2, which requires that a certified geotechnical engineer be retained during construction activities, would ensure that soils are evaluated for expansive potential. Therefore, with implementation of Mitigation Measure GEO-1 and GEO-2, impacts would be less than significant.

> ***Mitigation Measure GEO-2:*** *During excavation activities, a certified geotechnical engineer shall be retained by the Project Applicant/future Project Applicants to evaluate subgrade soils for the extent of their expansive potential. For areas found to contain soft, potentially expansive clays, the soil shall be removed (i.e., over excavated) and/or stabilized prior to the placement and compaction of fill. Stabilization techniques include, but are not limited to, the placement of 18 inches of ½-inch to ¾-inch crushed rock over stabilization fabric (such as Mirafi 500X or equivalent), placement of larger, angular stabilization rock (1-inch to 3-inch, clean) and use of chemical treatments such as lime to reduce the soil's expansive potential. In addition, building construction alternatives, such as the use of alternative foundation types (i.e., post-tension, piles, etc.) versus end-bearing foundations, shall be considered and implemented where appropriate. Final techniques shall be: (a) developed by a certified geotechnical engineer or engineering geologist: and (b) reviewed and approved by the City prior to issuance of a grading permit.*

Threshold (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 waste water?

Less Than Significant Impact. The WWMP Update does not recommend the use of septic tanks. The WWMP Update identifies improvements to gravity mains, force mains, lift stations, and the WWTP to mitigate capacity deficiencies and serve future growth. The recommended infrastructure would improve wastewater disposal systems and is necessary to serve the City's wastewater demands at buildout of the General Plan. Therefore, a less than significant impact would result.

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

Less Than Significant with Mitigation Incorporated. Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium- grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils (paleosols). They are also found in coarse-grained sediments, such as conglomerates or coarse alluvium sediments. Fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and, in fact, are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion. In contrast, archaeological and historic resources are often recognized by surface evidence of their presence. Future construction of wastewater infrastructure facilitated by the WWMP Update may result in adverse effects on unknown paleontological resources. Implementation of Mitigation Measure GEO-3 would reduce this potential impact to less than significant. This impact would not be any greater of an impact than identified in the General Plan EIR.

> ***Mitigation Measure GEO-3:*** *A trained paleontological monitor shall be present during individual project excavation activities greater than 5.0 feet in depth. Excavations below 5.0 feet have a high likelihood of encountering older alluvial wash deposits, which may contain paleontological resources. The monitoring for paleontological resources shall be conducted on a half-time basis, and on a full-time basis during excavation greater than 5.0 feet in depth. If paleontological resources are located during excavation, the monitoring program would change to full-time. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor shall be equipped to rapidly remove any large fossil specimens encountered during excavation. During monitoring, samples shall be collected and processed to recover micro-vertebrate fossils. Processing shall include wet-screen washing and microscopic examination of the residual materials to identify small vertebrate remains.*

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to geologic resources to occur, nor an increase in the severity of an impact related to geologic resources previously disclosed in the General Plan EIR, with compliance with General Policies and implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

VIII. GREENHOUSE GAS EMISSIONS

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns and precipitation. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), as well as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). These "greenhouse" gases allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping; thus, warming the Earth's atmosphere. GHG's are emitted by both natural processes and human activities. Concentrations of GHG have increased in the atmosphere since the industrial revolution. Human activities that generate GHG emissions include combustion of fossil fuels (CO2 and N2O); natural gas generated from landfills, fermentation of manure and cattle farming (CH4); and industrial processes such as nylon and nitric acid production (N2O).

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the "cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit of mass of gas relative to a reference gas". The reference gas for GWP is CO2; therefore, CO2 has a GWP factor of 1. The other main greenhouse gases that have been attributed to human activity include CH4, which has a GWP factor of 21, and N2O, which has a GWP factor of 310. When accounting for GHGs, all types of GHG emissions are expressed in terms of CO2 equivalents (CO2e) and are typically quantified in metric tons (MT) or million metric tons (MMT).

Assembly Bill (AB) 32, the California Global Warming Solutions Act, established a state goal of reducing GHG emissions to 1990 levels by the year 2020, which would require a reduction of approximately 28 percent from "business as usual" or forecasted emission levels. Senate Bill (SB) 97, a companion bill, directed the California Natural Resources Agency (Resources Agency) to certify and adopt guidelines for the mitigation of GHG or the effects of GHG emissions. SB 97 was the State Legislature's directive to the Resources Agency to specifically establish that GHG emissions and their impacts are appropriate subjects for CEQA analysis.

Executive Order B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. SB 32 (SB 32), signed into law in September 2016, codifies the 2030

GHG reduction target in Executive Order B-30-15. SB 32 authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. With SB 32, the California Legislature passed companion legislation AB 197, which provided additional direction for developing an updated Scoping Plan. CARB released the second update to the Scoping Plan to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 in November 2017.

Additionally, signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

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

Less Than Significant. The General Plan EIR found that buildout of the General Plan would result in a significant and unavoidable GHG emission impact. Given that the WWMP Update proposes infrastructure improvements that would serve the growth envisioned by the General Plan at buildout, which is consistent with the total buildout timeframe analyzed by the General Plan EIR for GHG emissions, the infrastructure identified by the WWMP Update is not expected to result in any greater GHG emission impacts than identified in the General Plan EIR. However, the WWMP is a policy document, and as such, does not propose the construction or operation of any wastewater infrastructure at this time, but would indirectly facilitate the construction of wastewater infrastructure.

Implementation of the WWMP would not induce substantial growth and would not result in significant generation of construction or operational GHG emissions. Construction related GHG emissions would be temporary and would cease upon project completion. During operation, the wastewater infrastructure proposed by the WWMP Update is not anticipated to generate substantial amounts of GHGs either directly or indirectly as the majority of the infrastructure consists of existing pipelines, pump stations, pressure regulating stations, and wells, etc. that do not rely on sources of GHG emitting inputs for their operation. Emissions associated with these activities would not be great enough to approach established significance thresholds. Therefore, impacts would be less than significant.

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

Less Than Significant. The 2010 General Plan EIR found that although the General Plan and the City's Sustainability Action Plan (SAP) include many goals, policies, and measures that would reduce the GHG emissions associated with buildout of the General Plan from projected business as usual (BAU) levels, these goals, policies, and measures would not meet the San Joaquin Valley Air Pollution Control District's threshold of a 29 percent reduction in GHG emissions from BAU projected emissions, resulting in a significant and unavoidable GHG emission impact.

The WWMP proposes infrastructure improvements that would serve the built out condition of the City as envisioned by the General Plan, which is consistent with the total buildout timeframe analyzed by the

General Plan EIR for these resources. Thus, the infrastructure identified by the WWMP Update is not expected to result in any greater GHG emission impacts than identified in the General Plan EIR. Nonetheless, the WWMP is a policy document that does not propose the construction or operation of any wastewater infrastructure at this time, although this document would indirectly facilitate the construction of wastewater infrastructure.

Phasing of the various facilities identified by the WWMP Update would be dependent on development and the need for additional wastewater facilities. It is anticipated that these various facilities would be developed over time. The proposed WWMP facilities would serve existing and planned development consistent with the General Plan. As described above, implementation of the WWMP Update would not induce substantial growth and would not result in significant generation of construction or operational GHG emissions. As the WWMP Update is consistent with the General Plan, the master plan would not conflict with the City's Sustainability Action Plan. Therefore, the WWMP Update would not conflict with applicable GHG, policies, and/or regulations. Less than significant impacts would result.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new greenhouse gas impact to occur, nor a substantial increase in the severity of a greenhouse gas impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

IX. HAZARDS AND HAZARDOUS MATERIALS

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☒	☐	☐

RESPONSES TO CHECKLIST QUESTIONS

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

No Impact. The WWMP Update identifies necessary infrastructure upgrades and expansions to serve the City's wastewater conveyance and treatment needs at General Plan buildout. The majority of the recommended infrastructure improvements proposed by the WWMP would not result in the routine use

or generation of hazardous materials that would require routine transport or disposal. However upgrades to the City's WWTP could involve processes that require the use of hazardous chemicals to treat wastewater. These hazardous chemicals would require routine transport and disposal. Moreover, the wastewater conveyance systems would routinely transport sewage which is a hazardous material. Accidental release of this material could result in a significant hazard to the public or the environment.

The General Plan EIR found that the safety risk from the routine transport of hazardous materials in the City and its SOI would be less than significant due to a combination of General Plan policies and actions and existing federal and State regulation. The updates to the WWMP would not result in any greater impacts than identified in the General Plan EIR, as the wastewater infrastructure the documents identify would be necessary to accommodate growth envisioned by the General Plan within the total buildout timeframe analyzed by the General Plan EIR for this resource. Nonetheless, as noted above, the WWMP is a policy document and as such would not result in the construction or operation of specific infrastructure projects at this time, but would indirectly facilitate the construction and operation of wastewater infrastructure.

Transport of hazardous material would occur on public roads and be subject to Occupational Health and Safety Standards Guidelines (Hazardous Waste Operations and Emergency Response Standard, Title 29 Code of Federal Regulations (CFR) Part 1910.120), as well as the Department of Toxic Substances Control (DTSC). Unless specifically exempted, hazardous waste transporters must comply with the California Highway Patrol Regulations; the California State Fire Marshal Regulations; and the U.S. Department of Transportation Regulations. In addition, hazardous waste transporters must comply with Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and the Title 22, Division 4.5, Chapter 13, of the California Code of Regulations, which are administered by DTSC[2]. All of these regulations are designed to minimize the danger of hazardous materials being released and causing a significant hazard to the public or the environment. Adherence to guidelines discussed above would reduce potential impacts to less than significant.

The potential for the wastewater infrastructure identified by the WWMP to fail, resulting in a significant hazard to the public or the environment would be mitigated to the greatest extent feasible by compliance with standard engineering practice and adherence to the latest version of the California Plumbing Code, which strives to minimize public risk by specifying technical standards of design, materials, workmanship and maintenance for plumbing systems, as well as the standards and policies enforced by the City of Tracy. Adherence to standard engineering practice, the latest version of the California Plumbing Code, and the standards and policies of the City of Tracy would reduce potential impacts to less than significant. No mitigation is required.

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

Less Than Significant Impact with Mitigation. The General Plan EIR acknowledges two superfund sites in

[2] (http://www.dtsc.ca.gov/HazardousWaste/Transporters.html)

the City of Tracy, in addition to areas in the City that have the potential to contain contamination in the buildings (such as asbestos), soil, or groundwater from past uses. According to the General Plan EIR, because no growth is planned on either superfund site through the implementation timeframe of the General Plan there would be no related impact. In addition, the General Plan EIR concluded that adherence to General Plan policy (Objective SA-4.1, P2), which requires developers to conduct the necessary level of environmental investigation prior to Project approval, buildout of the General Plan involving redevelopment of areas with hazardous materials present would not result in significant accidental releases of hazardous materials.

The WWMP identifies the infrastructure necessary to accommodate the wastewater demands of the growth envisioned by the General Plan at buildout. The recommended improvements to the WWMP would be within the same footprint analyzed in the General Plan EIR. Thus, the wastewater infrastructure identified by the WWMP respectively would not be expected to result in any greater impacts than identified in the General Plan EIR. The WWMP would indirectly facilitate the construction and operation of wastewater infrastructure projects. Construction of individual projects could potentially result in exposure to contaminated soil or groundwater from past uses. Developers of future projects would be required to conduct the necessary level of environmental investigation prior to Project approval, consistent with General Plan policy (Objective SA-4.1, P2), as identified in Mitigation Measure HAZ-1 below. Compliance with the aforementioned policies and implementation of Mitigation Measure HAZ-1, the proposed Project would not 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. Impacts would be less than significant with mitigation incorporated.

> ***Mitigation Measure HAZ-1:*** *In accordance with the requirements of Tracy General Plan policy (Objective SA-4.1, P2), potential for significant accidental releases of hazardous materials shall be addressed based on the findings of design-level environmental investigations. Design-level investigations shall be required to document any reasonably foreseeable storage, use, production or storage of hazardous or potentially hazardous materials or substances associated with implementation of the infrastructure improvements. The Development and Engineering Services Department shall ensure that all appropriate measures are implemented in order to reduce the risk of accidental releases of hazardous materials prior to the issuance of a grading permit.*

Threshold (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?

Less Than Significant Impact with Mitigation Incorporated. As described above under Threshold VII (a), the WWMP is a policy documents that identifies the wastewater infrastructure required to accommodate growth envisioned by the General Plan at buildout, which is consistent with the total buildout development scenario studied in the General Plan EIR for this resource. Moreover, as noted above under Threshold VIII (a), the infrastructure identified in the WWMP would require the use of, as well as handle hazardous materials. It is likely that this infrastructure would be within one-quarter mile of schools throughout the City.

The General Plan EIR determined that adherence to General Plan policies and actions along with existing federal and State regulation would reduce the potential threat of hazardous materials to human health

through buildout of the General Plan to a less than significant level. Given that the infrastructure identified by the WWMP would accommodate growth in the City's SOI and Planning Area during the total buildout timeframe analyzed by the General Plan EIR, it would not be expected to result in any greater threat of exposure to hazardous materials than identified in the General Plan EIR. In addition, as individual wastewater infrastructure projects identified by the WWMP come forward, they would be required to adhere to General Plan policies and actions along with existing federal and state regulation regarding hazardous materials, which would reduce the threat of potential exposure of hazardous materials within one-quarter mile of a school to a less than significant level. Moreover, individual projects would be required to implement Mitigation Measure HAZ-1, identified above, which would further reduce the risk of exposure to hazardous materials within one-quarter mile of a school by requiring individual projects to address the potential for significant accidental releases of hazardous materials based on the findings of design-level environmental investigations.

Threshold (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 create a significant hazard to the public or the environment?

Less Than Significant Impact. The Environmental Protection Agency (EPA) has listed two hazardous waste sites on the Superfund National Priorities List (NPL) within the City and its SOI. One is the Tracy Defense Depot, which is located on the east side of Tracy, on Chrisman Road between Valpico and Schulte Roads. The second is the Lawrence Livermore National Lab, which is located in the southwest corner of the Tracy Planning Area. Both sites currently have human exposure under control, but have not yet mitigated effects to groundwater migration. The WWMP does not identify any wastewater infrastructure improvements within these two sites. As noted above under Threshold VIII (a), the General Plan EIR found that there would be no significant impact through buildout of the General Plan in regard to either superfund site, as no growth is planned on either site. Therefore, a less than significant impact would occur.

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

No Impact. The Tracy Municipal Airport is a general aviation airport owned by the City and managed by the Parks and Community Services Department. It is located in the southern portion of the City. The WWMP identifies wastewater infrastructure improvements within two miles of the Tracy Municipal Airport. According to the General Plan EIR, implementation of the General Plan would result in increased development in areas within a two-mile radius of the Tracy Municipal Airport. This has the potential to create a significant impact if incompatible development is allowed within airport hazard zones, but implementation of policies and actions identified in the General Plan (Objective LU-6.3, P1 and P2, Objective SA5.1, P1, and Objective SA-5.1, A1) would avoid a significant safety impact with the Tracy Municipal Airport.

The WWMP identifies infrastructure improvements necessary to accommodate the growth envisioned by the General Plan though buildout consistent with the timeframe analyzed by the General Plan EIR for this environmental topic. Thus, the infrastructure improvements identified by the WWMP would not be

expected to result in any greater impacts than identified in the General Plan EIR. Moreover, due to the passive nature of proposed uses associated with the WWMP facilities, no impacts would occur with regard to safety hazards and airport use.

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

Less Than Significant Impact with Mitigation Incorporated. The City has an emergency preparedness plan. According to the General Plan EIR, the General Plan includes actions for the City to update its emergency preparedness plan in response to changes in land use, population and City boundaries associated with General Plan buildout, and to conduct periodic drills using the emergency response systems to test the effectiveness of City procedures (Objective SA-6.1, A1 and A4). The General Plan EIR found that new development and population growth within the City due to General Plan buildout would increase demand for emergency services during disasters, but that General Plan policies and actions, such as Objective SA-6.1, A1 and A4 would reduce any impacts associated with emergency preparedness to a less than significant level.

The infrastructure improvements identified by the WWMP would be necessary to serve the total buildout development scenario analyzed in the General Plan EIR and would not be expected to result in any greater demand for emergency services during disasters than identified in the General Plan EIR. Thus, implementation of the proposed facilities are not expected to cause significant impacts on emergency response plans or emergency evacuation plans with the implementation of mitigation for linear construction work (e.g., pipelines, gravity mains, etc.). Implementation of Mitigation Measure HAZ-2 would require preparation and implementation of a Traffic Management Plan to allow the continued vehicular use of the existing roadways or relegate traffic to agency-approved detour routes around the construction site. With implementation of Mitigation Measure HAZ-2, the construction of those facilities located outside of urbanized areas would not produce adverse impacts in this regard. For these reasons, impacts would be less than significant with mitigation.

> ***Mitigation Measure HAZ-2:*** *A Traffic Management Plan (TMP) shall be prepared and implemented to the satisfaction of the City of Tracy where construction of infrastructure improvements would affect roadways. The TMP shall include, but not limited to, the following measures:*
>
> - *Limit construction to one side of the road or out of the roadbed where possible.*
> - *Provision of continued access to commercial and residential properties adjacent to construction sites.*
> - *Provide alternate bicycle routes where existing bicycle routes are disrupted by construction activities.*
> - *Submit a truck routing plan, for approval by the City of Tracy in order to minimize impacts form truck traffic during material delivery and disposal.*
> - *Where construction is proposed for two-lane roadways, confine construction to one half of the pavement width. Establish one lane of traffic on the other half of the roadway using*

appropriate construction signage and flagmen, or submit a detour plan for approval by the City Traffic Engineer.

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

Less Than Significant Impact with Mitigation Incorporated. Infrastructure recommended by the WWMP would be located throughout the City, including within urbanized and undeveloped land. Those facilities located adjacent to or within undeveloped wildland areas have the potential to be subject to increased fire hazards. Depending on a facility's proximity to areas of high susceptibility to wildfires, that facility may be exposed to significant impacts due to wildfires. The General Plan includes policies to lessen the risk of wildland fires with Objectives SA-3.1, P1 through P5. These policies require new development projects in areas of potential wildland fires to include various safety measures. Furthermore, new development in areas of potential wildland fires would be required to follow fire-fighting standards as well as enforce training for the City's Fire Department. Objective S1-3.1, A1 would also require the City to continually update a map of areas vulnerable to wildland fires. Implementation of these City policies would reduce these impacts to a less than significant level. Additionally, implementation of Mitigation Measure HAZ-3, which includes requirements for fuel-modification zones, fire equipment access, and emergency preparedness protocol, would reduce these impacts to a less than significant level.

> ***Mitigation Measure HAZ-3:*** *Prior to approval of site design, facilities located within area of high susceptibility to wildfire hazards shall include fuel-modification zones, road standards that provide for fire equipment access, the assured provision of minimum water supply reserves for emergency fire use, fuel breaks and greenbelts, clearances around structures, and emergency preparedness protocol and procedures as recommended by the General Plan*.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to hazards and hazardous materials to occur, nor an increase in the severity of an impact related to hazards and hazardous materials previously disclosed in the General Plan EIR, with compliance with General Policies and implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

X. HYDROLOGY AND WATER QUALITY

WOULD THE PROJECT:

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

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. As identified in the General Plan EIR and Storm Drainage Master Plan, the City's Storm Water Management Plan (SWMP) establishes Best Management Practices (BMPs) to limit the discharge of pollutants from the City's storm sewer system to the Maximum Extent Practicable (MEP), as specified by Section 402(p) of the Clean Water Act. The Storm Water Management Plan includes BMPs related to construction site and post-construction runoff controls, illicit discharge detection and elimination, pollution prevention, as well as public education and outreach. The General Plan EIR

concludes that implementation of the BMPs identified in the City's Storm Water Management Plan, as well as General Plan policies and other regulatory requirements regarding stormwater management ensure that the buildout of the General Plan would not have a significant impact on storm water quality or waste discharge requirements.

The WWMP identifies infrastructure improvements necessary to accommodate the growth envisioned by the General Plan through buildout. This time period is consistent with the timeframe analyzed by the General Plan EIR for this resource. Thus, the improvements and expansions identified by the WWMP would not be expected to result in any greater impacts than identified in the General Plan EIR.

Short-term water quality impacts during construction of proposed facilities could result from sediment from grading operations, oil and grease from equipment, trash from worker and construction activities, nutrients from fertilizers, heavy metals, pathogens, and other substances. Discharge of these pollutants into waters of the U.S. is regulated by the State Water Resources Control Board (SWRCB). The SWRCB has adopted General Permit No. CAS000002- Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit) for California that applies to most construction-related storm water discharges within California. The General Permit requires that projects disturbing greater than one acre develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that specifies BMPs to prevent all construction pollutants from contacting storm water with the intent of keeping all products of erosion from moving offsite into receiving waters. The projects proposed as part of the WWMP would be subject to the provisions of the General Permit, and would be required to submit a SWPPP to the SWRCB, Central Valley Region (Regional Board).

During the operational phase, long-term water quality impacts in urban settings typically are a result of increases in impervious surface areas that in turn, increase the amount of stormwater runoff from a site and introduce pollutants into storm water that are typically associated with urban runoff. Pollutants would be washed by rainwater from rooftops, landscaped areas, parking areas and other impervious surfaces. The potential pollutants include chemicals from maintenance and cleaning supplies; landscape materials and products (pesticides, herbicides and fertilizers); oil, grease and heavy metals from automobiles; and petroleum hydrocarbons from fuels. The introduction of polluted runoff into receiving waters is a potentially significant impact.

However, due to the nature of the proposed facilities, no long term operational impacts are anticipated. This is because the majority of the proposed facilities would be located underground within existing right-of-way (gravity sewer pipelines and force mains) or would be installed within already existing or proposed facilities (upgrades to the MacArthur, Larch, and Hanson Lift Station; and infrastructure necessary to expand the City's existing WWTP), and as such would not create new impervious surface areas that could increase the amount water quality pollutants washed by rainwater into receiving waters. Other facilities that would be located above ground (lift stations) would have minimal increases in impervious surface area and would also be required to comply with applicable City policies and regulations, which would reduce this impact to less than significant.

Specifically, individual projects would be required to implement BMPs identified in the City's SWMP, which have been identified to limit the discharge of pollutants from the City storm sewer system to the MEP. Moreover, the individual projects would be required to comply with the general site design control measures for Low Impact Design (LID) identified in the City's 2008 Stormwater Quality Control (SWQC) Manual, as well as appropriate site-specific source and treatment control measures. LID is an approach to managing stormwater runoff that mimics the natural pre-development hydrology of a development site by using design techniques that infiltrate, filter, store, treat, evaporate and detain stormwater runoff close to the source. LID would help filter pollutants and provide effective water quality treatment. In addition, individual projects would be required to comply with maintenance procedures identified in the City's SWQC Manual to ensure that selected control measures would be maintained to provide effective, long-term pollution control. Therefore, there would be less than significant impacts on water quality during construction and operation.

Threshold (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?

Less Than Significant Impact. As described previously, the WWMP identifies wastewater infrastructure improvements required to accommodate future growth anticipated by the General Plan. The General Plan EIR found that the City's current use of groundwater can be supported without negatively impacting the aquifer beneath the City. This in combination with adopted City policies and General Plan policies would result in less than significant impacts on groundwater supply due to buildout of the General Plan.

The WWMP would not result in any greater impacts than identified in the General Plan EIR, as the infrastructure improvements these documents identify would be necessary to accommodate growth envisioned by the General Plan under the total buildout timeframe analyzed by the General Plan EIR for this resource. Nonetheless, as noted above, the WWMP are policy documents and as such neither would result in the construction or operation of specific improvements or expansions at this time. Regardless, it would facilitate the construction and operation of improvements. However, by their very nature, the wastewater improvements and expansions identified by the WWMP (e.g., force mains, lift stations, and gravity sewer pipelines, etc.) would not require the use of groundwater and therefore, would not deplete groundwater supplies. The City's 2015 Urban Water Management Plan (UWMP) identifies sufficient water supplies, including groundwater, to serve the City's demand through General Plan buildout. Impacts would be less than significant.

Threshold (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?

Less Than Significant with Mitigation Incorporated. Any site development or construction of new facilities has the potential to alter existing drainage patterns, primarily due to runoff from construction activities, increase in impervious surfaces, and vegetation removal. Implementation of Mitigation Measure HYD-1 would require minimization of time periods in which natural

drainages are disturbed. Therefore, with the implementation of Mitigation Measure HYD-1, impacts would be less than significant.

Mitigation Measure HYD-1: *Where drainage courses are crossed, temporarily altering their capacity or flow characteristics, appropriate precautions shall be incorporated into the project design to minimize the time period in which drainages are disturbed while maintaining the natural flow or provide additional capacity within the drainages during the construction period to handle designed flows.*

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant with Mitigation Incorporated. Refer to Response 4.10 (c) (i) above. A less than significant impact would occur with implementation of Mitigation Measure HYD-1.

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?

Less Than Significant Impact with Mitigation Incorporated. A majority of recommended wastewater infrastructure improvements include gravity sewer pipelines and force mains that would be placed underground within existing or proposed rights-of-way or within water or sewer easements. Improvements to the WWTP would occur within the existing facility and would not result in expansions that could increase impervious surfaces.

Future wastewater infrastructure would potentially increase the amount of impervious surface within the City and its SOI and create additional sources of stormwater runoff. However, as previously mentioned, the majority of improvements would be constructed underground and within existing rights-of-way and, as such, would not contribute a significant amount of runoff water to the stormwater drainage system. Therefore, implementation of the proposed WWMP Update would not have any greater impacts than those identified in the General Plan EIR and would not exceed the capacity of the City's storm water drainage system. Additionally, mitigation measure MM HYD-2 would require future development to implement storm drain facilities as necessary on a project-by-project basis. Impacts would be less than significant with mitigation incorporated.

Mitigation Measure HYD-2: *Prior to the issuance of grading permits, new development shall be required demonstrate to the satisfaction of the City Engineer that it has incorporated storm drainage facilities that conform to the SDMP and the City's SWQC Manual or that it has incorporated temporary retention facilities when downstream SDMP facilities are not constructed or operational.*

iv. Impede or redirect flood flows?

Less Than Significant Impact. The majority of the City and its SOI is located outside of a 100-year flood zone. However, portions of the northern SOI area are located within a 100-year flood zone.

The WWMP identifies force mains and gravity mains, which would be underground, within the 100-year flood zone. As such, future construction of infrastructure facilitated by the WWMP would not impede or redirect flood flows. Impacts would be less than significant.

Threshold (d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The General Plan EIR found portions of San Joaquin County could be subject to flooding due to tsunamis or seiches resulting in levee failure. However, Tracy is not in close proximity to the areas most likely to be affected. Additionally, the General Plan EIR identified some potential seiche risk for the City and its SOI through buildout of the General Plan due to overtopping of the San Luis Reservoir dam or other enclosed body of liquid during a seismic event. However, these risks were determined to be low and implementation of the General Plan was not expected to increase them. Also, the hillsides in the southwest portion of the City and its SOI could be at risk for mudflows as a result of a seiche during the buildout scenario timeframe of the General Plan, but according to the General Plan EIR no new development is proposed in the hillsides during the buildout scenario timeframe of the General Plan, where there is a risk of mudflow.

The improvements identified by the WWMP would accommodate growth in the City's SOI and Planning Area during through the total buildout timeframe analyzed by the General Plan EIR and because of this, they would not be expected to result in any greater seiche, tsunamis, or mudflow impacts than identified in the General Plan EIR.

The proposed wastewater infrastructure improvements identified by the WWMP would not be at risk from inundation by seiche, tsunamis or mudflows for the following reasons: the City is not located near areas likely to be affected by seiche flooding; the City is located inland and could not be affected by a tsunami; and the none of the infrastructure improvements would be located near any physical or geologic features that would pose a mudflow hazard, such as a volcano or hillsides. Impacts would be less than significant.

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

Less Than Significant Impact. A majority of WWMP facilities would be constructed below grade within street ROWs. However, construction of select above-ground facilities (e.g. lift stations) would result in a minimal increase in impervious surfaces and would not substantially interfere with groundwater drainage and infiltration.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new hydrological impact to occur, nor an increase in the severity of a hydrological impact previously

disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XI. LAND USE AND PLANNING

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
Would the project:				
a. Physically divide an established community?	☐	☐	☒	☐
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?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project physically divide an established community?

Less Than Significant Impact. According to the General Plan EIR, buildout of the General Plan would not physically divide an established community and no associated impact is anticipated because the majority of development would occur on vacant land or with the City right-of-way where no established community exists, and the General Plan contains several policies that when implemented would preserve the character, identity, and quality of redeveloped neighborhoods. Additionally, infrastructure necessary to increase capacity at the City's existing WWTP would be implemented within existing City owned facilities and would not have an impact on an established community. The WWMP would not result in any greater impacts than identified in the General Plan EIR, as the wastewater improvements they identify would be necessary to accommodate growth envisioned by the General Plan through the total buildout timeframe analyzed by the General Plan EIR for this resource.

An example of a project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. A majority of recommended wastewater infrastructure would be constructed below ground within ROWs would not have any impact on General Plan designations, zoning, or the physical arrangement of an established community. Therefore, less than significant impacts would result. No mitigation is required.

Threshold (b) Would the project 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?

Less Than Significant Impact. The WWMP build upon the goals and objectives contained in the Public Facilities and Services Element of the General Plan as it identifies wastewater infrastructure improvements required to accommodate future growth anticipated by the General Plan. As the WWMP is a comprehensive updates to the 2012 WWMP, respectively, to address significant new residential and

commercial development that has occurred in the City and future developments since the approval of the 2011 General Plan, the updated WWMP would be in fulfillment of Objective PF-7.1, Action A1 of the Public Facilities and Services Element which states , "Prepare a comprehensive update to the Wastewater Master Plan upon adoption of the General Plan and update on a regular basis. The Wastewater Master Plan shall identify the expected number of additional wastewater facilities, potential locations for those facilities and locations for the land application of treated effluent." The updated WWMP would be in fulfillment of these listed objectives and as such, would not conflict with applicable policies and regulations. A less than significant impact would occur.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new land use impact to occur, nor an increase in the severity of a land use impact previously disclosed in the General Plan EIR, with compliance with General Plan policies discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XII. MINERAL RESOURCES

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less Than Significant Impact. The General Plan EIR found that potential development under the Tracy General Plan could occur on or around land containing important mineral resources, potentially resulting in significant loss of mineral resources and associated recovery sites. The Tracy General Plan designates specific areas for aggregate mining in the Southern portion of Tracy that the City and State have agreed to protect. Future improvements to the wastewater infrastructure would primarily be located within existing ROWs and would be designed to avoid the specific areas for aggregate mining. Therefore, a less than significant impact would occur.

Threshold (b) Would the project result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less Than Significant Impact. Refer to response XII(a), above.

Cumulative Impacts

As discussed above, the proposed Project would not cause a new mineral resource impact to occur, nor an increase in the severity of mineral resource impacts previously identified in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XIII. NOISE

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project result in 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?

Less Than Significant With Mitigation Incorporated. Construction and implementation of proposed facilities identified in the WWMP Update would be dependent upon increased wastewater generation in the Tracy Planning Area. Short-term construction noise would be dependent upon the phasing schedule of subsequent components. However, it is anticipated that future construction impacts associated with the WWMP Update would result in similar construction noise impacts.

Construction noise estimates are based upon noise levels on typical noise levels generated by construction equipment published by the Federal Transit Administration (FTA) and FHWA. Construction noise is assessed in dBA L_{eq}. This unit is appropriate because L_{eq} can be used to describe noise level from operation of each piece of equipment separately, and levels can be combined to represent the noise level from all equipment operating during a given period. The Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (2018) (FTA Noise and Vibration Manual) identifies a maximum 1-hour noise level standard of 90 dBA L_{eq} at residential uses and 100 dBA L_{eq} at commercial and industrial uses for short-term construction activities.

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g. land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During

construction, exterior noise levels could affect the residential neighborhoods surrounding the construction site. Project construction could occur approximately 25 feet from existing sensitive receptors. However, construction activities would occur throughout the Project site and would not be concentrated at a single point near sensitive receptors. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery. During construction, exterior noise levels could affect the residential neighborhoods near the construction site.

Construction activities associated with development of the Project could include demolition, grading, site preparation, and paving. Such activities may require industrial saws, excavators, and dozers for demolition; tractors and dozers during site preparation; graders, dozers, and tractors during grading; and pavers, rollers, mixers, tractors, and paving equipment during paving. Grading and excavation phases of project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. It should be noted that only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute. No pile-driving is anticipated during construction.

Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels associated with individual construction equipment are listed in **Table 6-2: Typical Construction Equipment Noise Levels**.

Noise impacts for mobile construction equipment are typically assessed as emanating from the center of the equipment activity or construction site. For the proposed Project, this center point would be conservatively approximately 50 feet from the nearest sensitive receptor. These assumptions represent the worst-case noise scenario because construction activities would typically be spread out throughout the project site, and thus some equipment would be further away from the affected receptors. In addition, construction noise levels are not constant, and in fact, construction activities and associated noise levels would fluctuate and generally be brief and sporadic, depending on the type, intensity, and location of construction activities. Construction noise would also be acoustically dispersed throughout the Project site and will be masked by freeway noise and roadway noise.

As indicated in **Table 6-2**, construction noise levels would range between 76 dBA and 88 dBA at the sensitive receptors approximately 50 feet away from the construction site. The highest anticipated construction noise level of 88 dBA is expected to occur during the building construction and paving phases from the use of dozers, pavers, concrete mixer. Therefore, construction noise would not exceed the FTA's standards of 90 dBA L_{eq} at residential uses and 100 dBA L_{eq} at commercial and industrial uses.

Table 6-2: Typical Construction Equipment Noise Levels			
Equipment	**Typical Noise Level (dBA) at 25 Feet from the Source**	**Typical Noise Level (dBA) at 50 Feet from the Source**	**Typical Noise Level (dBA) at 100 Feet from the Source**
Concrete Mixer	91	85	79
Concrete Pump	88	82	76
Concrete Vibrator	82	76	70
Cranes	89	83	77
Dozer	91	85	79
Generator	88	82	76
Grader	91	85	79
Loader	86	80	74
Paver	91	85	79
Pump	83	77	71
Roller	91	85	79
Saw	82	76	70
Scraper	91	85	79
Shovel	88	82	76
Truck	90	84	78

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.
Notes:
1. Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1+20Log(d_1/d_2)$ Where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance

To further minimize any extraneous construction noise impacts on adjacent sensitive land uses, the developers of proposed facilities would be required to install noise attenuating buffers near residential areas, place mufflers on equipment engines, and orient stationary sources to direct noise away from sensitive uses as specified in Mitigation Measure NOI-1. Implementation of Mitigation Measure NOI-1 would reduce short-term construction impacts to less than significant.

Operational noise associated with WWMP facilities would mainly consist of stationary noises, with the exception of occasional maintenance-related traffic or operational related traffic associated with future water treatment and/or wastewater treatment plants which would generate minimal traffic noise. Thus, significant traffic related noise impacts would not occur. Additionally, all future facilities would be constructed according to industry standards and according to the City Noise Ordinance requirements, which would ensure that any operational noise impacts would not be excessive or significant. In addition, implementation of Mitigation Measure NOI-2 would require that facilities located within 150 feet of sensitive receptors have a noise study prepared to determine potential noise impacts. With the implementation of Mitigation Measure NOI-2, operational impacts would be less than significant.

> ***Mitigation Measure NOI-1:*** *Prior to the issuance of grading permits and to the satisfaction of the City of Tracy, the Project Contractor shall be required to implement feasible noise control measures to reduce daytime construction noise levels to meet the daytime speech interference criterion of 70-dBA for infrastructure projects located within 500 feet of any noise-sensitive receptors (e.g.,*

residences, schools, childcare canters, churches, hospitals, and nursing homes). Such control measures could include any of the following, as appropriate:

- *To the extent possible, all mechanical equipment shall be oriented away from the nearest noise sensitive receptors; and*
- *All mechanical equipment shall be screened and enclosed to minimize noise.*
- *Construction contracts shall specify that all construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other state required noise attenuation devices.*
- *All residential units located within 1,000 feet of the construction site shall be sent a notice regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the construction site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints.*
- *A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within one-quarter mile of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.*
- *Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and use of electric air compressors and similar power tools, rather than diesel equipment, shall be used where feasible.*
- *During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.*
- *Operation of equipment requiring use of back-up beepers shall be avoided near sensitive receptors to the extent feasible during nighttime hours (10:00 PM to 7:00 AM).*
- *If impact equipment (e.g., jack hammers, pavement breakers, and rock drills) is used during construction, hydraulically or electric-powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used (a muffler can lower noise levels from the exhaust by up to about 10 dBA).*

Mitigation Measure NOI-2: *Infrastructure or facility improvements located within 150 feet of sensitive receptors (i.e., residential homes, schools, or hospitals) shall require preparation of a noise study to verify that the design shall meet the applicable City noise standards. Note that these noise limitations are for steady-state, base load operations, and exclude startups, shutdowns, and off-normal or emergency conditions.*

Threshold (b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Increases in groundborne vibration levels attributable to the Project would be primarily associated with construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The FTA has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50 inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage. In general, the FTA architectural damage criterion for continuous vibrations (i.e. 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience cosmetic damage (e.g. plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and underground geological layer between vibration source and receiver.

Table 6-3: Typical Construction Equipment Vibration Levels, lists vibration levels at 25 and 50 feet for typical construction equipment. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 6-3,** based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.001 to 0.089 in/sec PPV from 25-50 feet from the source of activity. Construction of WWMP facilities could be located adjacent to urbanized areas that contain sensitive receptors, including schools, hospitals, and residential areas.

As shown in **Table 6-3**, the highest vibration levels are achieved with the large bulldozer operations. This construction activity is expected to take place during grading. The active construction zone for the proposed project would be more than 25 feet from the closest structure. Therefore, construction equipment vibration velocities would not exceed the FTA's 0.20 PPV threshold. In addition, construction activities would occur throughout the project site and would not be concentrated at the point closest to the nearest sensitive receptor(s). Therefore, construction vibration impacts associated with the project would be less than significant.

Table 6-3: Typical Construction Equipment Vibration Levels		
Equipment	**Typical Level (dBA) 25 Feet from the Source[1]**	**Typical Level (dBA) 50 Feet from the Source[1]**
Large Bulldozer	0.089	0.032
Loaded Trucks	0.076	0.027
Rock Breaker	0.059	0.021
Jackhammer	0.035	0.012
Small Bulldozer/Tractors	0.003	0.001
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018 Notes: Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1+20Log(d_1/d_2)$Where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance		

Due to the nature of the proposed Project (updates to the City of Tracy's Wastewater Infrastructure Master Plan, and the potential indirect construction and operation of wastewater infrastructure) operational vibration would be negligible. Therefore, operational vibration impacts would be less than significant.

Threshold (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??

Less Than Significant Impact. The Tracy Municipal Airport (TMA) is a general aviation airport owned by the City and managed by the Parks and Community Services Department. The proposed Project consists of updating the City's WWMP and would not include development that would expose people to excessive noise levels from airports. Impacts would be less than significant.

Cumulative Impacts

The WWMP identify the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. As discussed above, the proposed Project would not cause a new noise impact to occur, nor an increase in the severity of a hydrological impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XIV. POPULATION AND HOUSING

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The WWMP Update identifies wastewater infrastructure improvements necessary to accommodate the growth envisioned by the General Plan through buildout, consistent with the total buildout timeframe analyzed by the General Plan EIR for this environmental topic. Implementation of the updates to the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. Therefore, a less than significant impact would occur and no mitigation is required.

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

No Impact. The updates to the WWMP Update does not identify any wastewater infrastructure improvements that would displace existing housing. Therefore, no impacts would occur.

Cumulative Impacts

The WWMP Update identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to population and housing to occur, nor an increase in the severity of an impact related to population and housing previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XV. PUBLIC SERVICES

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
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:				
i. Fire protection?	☐	☒	☐	☐
ii. Police protection?	☐	☒	☐	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

RESPONSES TO CHECKLIST QUESTIONS

Threshold (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?

i. Fire Protection

Less Than Significant with Mitigation Incorporated. Implementation of the WWMP Update could delay Fire Department response times during pipeline construction within roadways. Similarly, Fire Department response time could be impacted due to roadblocks, construction delays, and detours of the various facilities. However, with implementation of detour plans and coordination with the Tracy Fire Department, prior to construction, as identified in Mitigation Measure PS-1, impacts to fire services would less than significant. Long-term operational impacts include the need for fire protection services of additional facilities. However, these impacts would be minimal and are considered less than significant.

Mitigation Measure PS-1: Prior to construction of individual infrastructure facilities, the City shall coordinate with the Fire Department and other affected fire protection services in surrounding jurisdictions to review construction detour plans. Specifically, the following shall occur:

- Emergency vehicle access to structures and fire hydrants in the project area shall be maintained
- A prior notice of at least 24 hours in advance of an impact even such as a road closure or disruption of water service shall be given to the appropriate authorities
- Traffic control measures, such as the use of flagmen, shall be used, if deemed necessary, in order to regulate traffic to ensure that access will be maintained to all structures for emergency response

ii. Police Protection

Less Than Significant Impact with Mitigation Incorporated. Implementation of the WWMP Update could delay Police Department response times during pipeline construction within roadways. Police Department response times could be impacted due to roadblocks, construction delays, and detours of the various facilities. However, with implementation of detour plans and coordination with the Tracy Police Department prior to construction, as identified in Mitigation Measure PS-2, impacts to police services would be less than significant. Long-term operational impacts include the need for police protection services of additional facilities. However, these impacts would be minimal and are considered less than significant.

Mitigation Measure PS-2: Prior to construction of individual infrastructure facilities, the City shall coordinate with the Tracy Police Department to review construction detour plans. Specifically, the following shall occur:

- A prior notice of at least 24 hours in advance of an impact event such as a road closure or disruption of water service shall be given to the appropriate authorities
- Prior to construction, the Tracy Police Department and California Highway Patrol shall be notified of all roadway areas, which will be obstructed to allow them to efficiently respond to any emergencies
- Traffic control measures, such as the use of flagmen, shall be used, if necessary, in order to regulate traffic to ensure that access will be maintained to all structures for emergency response

iii. Schools

No Impact. Implementation of the WWMP Update would not generate students either directly or indirectly and, therefore, would not result in impacts to school services.

iv. Parks

No Impact. Implementation of the WWMP Update would not generate residents either directly or indirectly and, therefore, would not result in impacts to parks.

v. Other Public Facilities

No Impact. The proposed facilities would not generate residents either directly or indirectly, therefore, would not result in impacts to other public facilities.

Cumulative Impacts

The WWMP Update identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new public services impact to occur, nor an increase in the severity of an impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XVI. RECREATION

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

RESPONSES TO CHECKLIST QUESTIONS

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

No Impact. The General Plan does not find any significant impacts to recreational areas arising as a result of General Plan buildout. The proposed WWMP Update would support buildout and would not result in population growth that could increase the use of existing parks and recreational facilities. No impact would occur.

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

No Impact. The proposed WWMP Update would not require the construction or expansion of recreational facilities, and as a result would not create any adverse physical effects on the environment. Therefore, there would be no impact.

Cumulative Impacts

The WWMP Update identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to recreation to occur, nor an increase in the severity of an impact related to recreation facilities. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XVII. TRANSPORTATION

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☒	☐	☐

RESPONSES TO CHECKLIST QUESTIONS

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

Less Than Significant Impact. The WWMP Update identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Automobile and truck traffic volumes associated with project-related construction activities would vary throughout the construction phases, as different activities occur. Further, construction could result in temporary detours. However, Project-related construction traffic would be temporary and cease upon project completion. During operations, the proposed Project would generate minimal vehicle trips to support ongoing facility maintenance. Therefore, Project implementation would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

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

Less Than Significant Impact. The WWMP Update would not result in a conflict with an applicable CMP or travel demand measure as the proposed Project would generate minimal vehicle trips for ongoing maintenance activities. Thus, the proposed changes would not result in conflict with an applicable CMP, TDM strategies, or be inconsistent with CEQA Guidelines Section 15064.3. Impacts would be less than significant.

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

No Impact. Due to the nature and scope of the proposed WWMP Update, Project implementation would not have the capacity to increase hazards due to a design feature or incompatible uses. The vast majority of proposed facilities would be underground pipelines and would not affect roadway operations. Proposed capacity increases to the WWTP would be located within an existing facility and therefore implementation and operation would not lead to any increase hazard due to geometric design feature or incompatible use. Therefore, no impacts would result.

Threshold (d) Result in inadequate emergency access?

Less Than Significant Impact with Mitigation Incorporated. Construction of facilities identified in the proposed WWMP Update could delay emergency response times due to roadblocks, construction delays, and detours. However, with implementation of Mitigation Measures PS-1 and PS-2 above, impacts associated with inadequate emergency access would less than significant.

Cumulative Impacts

The WWMP Update identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP Update would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new transportation impact to occur, nor an increase in the severity of a transportation impact previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XVIII. TRIBAL CULTURAL RESOURCES

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. 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)?	☐	☒	☐	☐
ii. 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?	☐	☒	☐	☐

RESPONSES TO CHECKLIST QUESTIONS

Since certification of the General Plan EIR, the topic Tribal Cultural Resources was added to the Appendix G checklist of CEQA thresholds. On September 25, 2014, Governor Brown signed Assembly Bill (AB) 52 into law, which requires tribal cultural resources to be considered during the CEQA process. AB 52 is applicable to projects for which a Notice of Mitigated Negative Declaration has been filed on or after July 2015. Because a Notice of a WWMP ISMND was filed in 2012, tribal cultural resources were not required to be analyzed under the Section 15164 standards because it was not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent. As the WWMP updates provide an evaluation of several changed conditions, new water system facilities, and new water supply opportunities from what was included in the 2012 Citywide WWMP, the City has initiated consultation with local tribal representatives consistent with the requirements of AB 52. Mitigation measures related to potential impacts to historic and archeological resources in the Tracy Planning Area are described in this section.

Threshold (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 and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. **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)?**

ii. **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?**

Less Than Significant with Mitigation Incorporated. In compliance with PRC Section 21080.3.1(b), the City has provided formal notification to California Native American tribal representatives that have previously requested notification from the City regarding projects within the geographic area traditionally and culturally affiliated with the tribe. Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on tribal cultural resources as defined in PRC Section 21074.

On June 2, 2022, City staff contacted the following tribal representatives via mailed correspondence:

Buena Vista Rancheria of Me-Wuk Indians
California Valley Miwok Tribe
California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of CA
Chicken Ranch Rancheria of Me-Wuk Indians
Ione Band of Miwok Indians
Muwekma Ohlone Indian Tribe of the SF Bay Area
North Valley Yokuts Tribe
The Confederated Villages of Lisjan Nation
Tule River Indian Tribe
United Auburn Indian Community of the Auburn Rancheria
Wilton Rancheria
Wuksache Indian Tribe/Eshom Valley Band
Nashville Enterprise Miwok-Maidu-Nishinam Tribe
Southern Sierra Miwuk Nation
Randy Yonemura
Southern Sierra Miwuk Nation

The City received one request for AB 52 consultation with the City from the Confederated Villages of Lisjan Nation. The consultation between representatives of the City of Tracy and Confederated Village of Lisjan Nation occurred on August 24, 2002. As a result of the consultation, minor edits were incorporated into Mitigation Measure CR-1.

As discussed in Section V, Cultural Resources, the Tracy Planning Area contains known archaeological sites and likely contains undiscovered archaeological sites as well, particularly in undeveloped areas. Thus, the potential exists for water service and wastewater improvements to affect previously unidentified tribal cultural resources during construction activities. However, as noted throughout this document, the WWMP are policy documents and do not propose the construction or operation of specific wastewater infrastructure projects at this time. Adoption of these Master Plans would not directly result in the construction and operation of infrastructure that could have negative environmental effects. However,

their adoption would indirectly facilitate the construction and operation of wastewater infrastructure. As such, implementation of Mitigation Measures CR-1 and CR-2 in Section V, Cultural Resources, would reduce impacts to archaeological resources, including resources that could be of cultural value to a tribe. Compliance with PRC Section 21083.2 and the listed mitigation measures would ensure the WWMP Update improvements would not cause a substantial adverse change in the significance of a tribal cultural resource. For these reasons, impacts associated with tribal cultural resources would be reduced to a less than significant level with mitigation.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact related to tribal cultural resources to occur, nor an increase in the severity of an impact related to tribal cultural resources previously disclosed in the General Plan EIR, with implementation of the mitigation measures discussed in this section. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XIX. UTILITIES AND SERVICE SYSTEMS

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) Would the project 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?

Less Than Significant Impact. Project construction would occur predominantly within existing street ROWs and would not impact facilities required to provide electric power, natural gas, or telecommunications facilities. As described throughout this document, the proposed WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. As described herein, variety of environmental effects could occur as a result of the construction of new improvements or expansion of existing improvements as identified in the WWMP. However, all identified impacts would be reduced to less than significant with implementation of mitigation measures identified in this document.

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

Less Than Significant Impact. The City's 2015 Urban Water Management Plan (UWMP) identifies sufficient water supplies, including groundwater, to serve the City's demand through buildout of the General Plan. A less than significant impact is anticipated.

Threshold (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?

Less Than Significant Impact. The purpose of the WWMP is to identify the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. As such, its implementation would not result in a determination that there is inadequate capacity to serve the demand projected in the WWMP. Therefore, impacts would be less than significant.

Threshold (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?

Less Than Significant Impact. Construction debris from pipeline trenching and site preparation of the various facilities would generate solid waste that would need to be properly disposed of in the appropriate landfill. The generation of additional construction-related waste would be temporary and would cease upon completion of the proposed facilities. Solid waste generation during operation of the proposed facilities is anticipated to be minimal, and would not result in a significant increase in waste for disposal in area landfills. Therefore, impacts would be less than significant.

Threshold (e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed Project would comply with all federal, state, and local statues and regulations related to solid waste. As discussed above, project implementation would not generate substantial increase in waste over the original project. Therefore, impacts would be less than significant.

Cumulative Impacts

The WWMP identifies the wastewater infrastructure improvements and expansions needed to accommodate future development envisioned by the General Plan through buildout. Implementation of the WWMP would not induce any additional or new population growth not already identified in the General Plan or studied in the General Plan EIR. As discussed above, the proposed Project would not cause a new impact concerning utilities and service systems to occur, nor an increase in the severity of an impact previously disclosed in the General Plan EIR. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XX. WILDFIRE

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☒	☐	☐

RESPONSES TO CHECKLIST QUESTIONS

Threshold (a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. At the time the General Plan EIR was composed, Wildfire was not a resource topic of evaluation. Since the approval of the General Plan EIR, the CEQA Appendix G checklist has been updated to include Wildfire. However, Wildland Fires were evaluated as part of the Hazards and Hazardous Materials in the General Plan EIR. There are no very high fire hazard severity zones within the City. The General Plan states that the City will provide fire and emergency response facilities and personnel necessary to meet growth of the area. The proposed WWMP improvements would not induce additional growth within the City or expand the City's service area. Therefore, there is no impact.

Threshold (b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?

No Impact. There are no very high fire hazard severity zones within the City. The General Plan policies detail that any new developments must satisfy fire flow and other design requirements as established by

the Fire Department, as well as assess steep terrain. The proposed WWMP improvements would be required to demonstrate compliance and would not create any new risks or exposure. Therefore, there is no impact.

Threshold (c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?

No Impact. There are no very high fire hazard severity zones within the City. General Plan policies state that in addition to the aforementioned fire flow requirements, the City will promote coordination between land use planning and fire protection by requiring fire hazard surveying and implementing infrastructure design requirements. As previously concluded in the General Plan EIR, any future improvements would also have to satisfy all requirements and would be subject to separate review from applicable departments. Therefore, there is no impact.

Threshold (d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?

Less Than Significant with Mitigation Incorporated. As mentioned in responses (a-c) above, there are no very high fire hazard severity zones within the city. Facilities proposed as part of the SDMP Update would be located throughout the City and its SOI, including within urbanized and undeveloped land. Therefore, those facilities located adjacent to or within undeveloped wildland areas have the potential to be subject to increased fire hazards. Depending on a facility's proximity to areas of high susceptibility to wildfires, that facility may be exposed to significant impacts due to wildfires. Implementation of Mitigation Measure WF-1, which includes requirements for fuel-modification zones, fire equipment access, and emergency preparedness protocol, would reduce these impacts to a less than significant level.

> ***Mitigation Measure WF-1:*** *Prior to approval of site design, facilities located within area of high susceptibility to wildfire hazards shall include fuel-modification zones, road standards that provide for fire equipment access, the assured provision of minimum water supply reserves for emergency fire use, fuel breaks and greenbelts, clearances around structures, and emergency preparedness protocol and procedures as recommended by the General Plan.*

Cumulative Impacts

As discussed above, the proposed Project would not cause a new wildfire impact to occur, nor an increase in the severity of a wildfire impact previously identified in the General Plan EIR, with implementation of the mitigation measures discussed. Therefore, the proposed Project would not cause either a new cumulative impact to occur, nor a substantial increase in the severity of a cumulative impact previously disclosed.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

WOULD THE PROJECT:

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*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?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

RESPONSES TO CHECKLIST QUESTIONS

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

Less Than Significant with Mitigation Incorporated. As discussed in Section IV (Biological Resources) and Section V (Cultural Resources) of this Initial Study/CEQA Guidelines Section 15183 Analysis, the WWMP Update has the potential to result in potentially significant impacts on the environment. However, Mitigation Measures BIO-1 through BIO-9 would reduce impacts on biological resources to less than significant, while Mitigation Measures CR-1 through CR-3 would reduce impacts on cultural resources to less than significant.

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

Less Than Significant Impact. Development projects identified in the WWMP Update would occur over time and would be dependent on future development. Therefore, it is not anticipated that cumulative

impacts would result from implementation of improvements. Adherence to the mitigation measures identified throughout this document would reduce potential short-term and long-term impacts to less than significant.

Threshold (c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? Determination: Less Than Significant Impact with Mitigation Incorporated.

Less Than Significant Impact. As discussed in various sections of this Initial Study/State CEQA Guidelines Section 15183 Analysis, the WWMP Update has the potential to result in significant impacts on the environment. However, with implementation of mitigation measures identified throughout this document, impacts would be less than significant.

Section 7.0 **REFERENCES**

The following references were utilized during preparation of this Initial Study/CEQA Guidelines Section 15183 Analysis.

California Environmental Quality Act (CEQA) Guidelines, 2021.

City of Tracy *General Plan EIR*, October 2005.

City of Tracy, *Amendment to the Draft EIR,* March 2006.

City of Tracy, *General Plan Supplemental EIR*, February 2010.

City of Tracy, *General Plan*, February 2011.

City of Tracy, *Wastewater Master Plan Update,* May 2022.

Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Data

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Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Tracy Wastewater Master Plan

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.36	Acre	0.36	15,463.80	0
Other Asphalt Surfaces	9.29	1000sqft	0.21	9,292.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2026
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Anticpated construction schedule

Demolition -

Grading -

Construction Off-road Equipment Mitigation - BAAQMD rule compliance

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	1,233.33

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0412	0.3500	0.4352	8.3000e-004	0.0224	0.0144	0.0368	6.1200e-003	0.0133	0.0195	0.0000	73.7391	73.7391	0.0186	1.6500e-003	74.6950
Maximum	**0.0412**	**0.3500**	**0.4352**	**8.3000e-004**	**0.0224**	**0.0144**	**0.0368**	**6.1200e-003**	**0.0133**	**0.0195**	**0.0000**	**73.7391**	**73.7391**	**0.0186**	**1.6500e-003**	**74.6950**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.0412	0.3500	0.4352	8.3000e-004	0.0138	0.0144	0.0283	3.7900e-003	0.0133	0.0171	0.0000	73.7390	73.7390	0.0186	1.6500e-003	74.6949
Maximum	**0.0412**	**0.3500**	**0.4352**	**8.3000e-004**	**0.0138**	**0.0144**	**0.0283**	**3.7900e-003**	**0.0133**	**0.0171**	**0.0000**	**73.7390**	**73.7390**	**0.0186**	**1.6500e-003**	**74.6949**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**38.15**	**0.00**	**23.18**	**38.07**	**0.00**	**12.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2025	3-31-2025	0.2126	0.2126
2	4-1-2025	6-30-2025	0.1726	0.1726
		Highest	0.2126	0.2126

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1200e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-004	1.7000e-004	0.0000	0.0000	1.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1200e-003**	**0.0000**	**9.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0000**	**1.8000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.1200e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-004	1.7000e-004	0.0000	0.0000	1.8000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1200e-003**	**0.0000**	**9.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0000**	**1.8000e-004**

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

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2025	1/14/2025	5	10	
2	Site Preparation	Site Preparation	1/15/2025	1/15/2025	5	1	
3	Building Construction	Building Construction	1/18/2025	6/6/2025	5	100	
4	Grading	Grading	1/16/2025	1/17/2025	5	2	
5	Paving	Paving	6/7/2025	6/13/2025	5	5	
6	Architectural Coating	Architectural Coating	6/14/2025	6/20/2025	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.57

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,485 (Architectural Coating

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	78.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	154.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.5300e-003	0.0000	8.5300e-003	1.2900e-003	0.0000	1.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0255	0.0368	6.0000e-005		1.0500e-003	1.0500e-003		1.0000e-003	1.0000e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	**2.8700e-003**	**0.0255**	**0.0368**	**6.0000e-005**	**8.5300e-003**	**1.0500e-003**	**9.5800e-003**	**1.2900e-003**	**1.0000e-003**	**2.2900e-003**	**0.0000**	**5.2123**	**5.2123**	**9.3000e-004**	**0.0000**	**5.2357**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.8200e-003	1.0100e-003	2.0000e-005	6.7000e-004	5.0000e-005	7.1000e-004	1.8000e-004	4.0000e-005	2.3000e-004	0.0000	2.1267	2.1267	1.0000e-005	3.3000e-004	2.2266
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	9.8000e-004	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3009	0.3009	1.0000e-005	1.0000e-005	0.3033
Total	**2.0000e-004**	**4.9000e-003**	**1.9900e-003**	**2.0000e-005**	**1.0700e-003**	**5.0000e-005**	**1.1100e-003**	**2.9000e-004**	**4.0000e-005**	**3.4000e-004**	**0.0000**	**2.4275**	**2.4275**	**2.0000e-005**	**3.4000e-004**	**2.5300**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.6500e-003	0.0000	3.6500e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8700e-003	0.0255	0.0368	6.0000e-005		1.0500e-003	1.0500e-003		1.0000e-003	1.0000e-003	0.0000	5.2123	5.2123	9.3000e-004	0.0000	5.2357
Total	**2.8700e-003**	**0.0255**	**0.0368**	**6.0000e-005**	**3.6500e-003**	**1.0500e-003**	**4.7000e-003**	**5.5000e-004**	**1.0000e-003**	**1.5500e-003**	**0.0000**	**5.2123**	**5.2123**	**9.3000e-004**	**0.0000**	**5.2357**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	4.8200e-003	1.0100e-003	2.0000e-005	6.4000e-004	5.0000e-005	6.8000e-004	1.8000e-004	4.0000e-005	2.2000e-004	0.0000	2.1267	2.1267	1.0000e-005	3.3000e-004	2.2266
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	9.8000e-004	0.0000	3.8000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3009	0.3009	1.0000e-005	1.0000e-005	0.3033
Total	**2.0000e-004**	**4.9000e-003**	**1.9900e-003**	**2.0000e-005**	**1.0200e-003**	**5.0000e-005**	**1.0600e-003**	**2.8000e-004**	**4.0000e-005**	**3.2000e-004**	**0.0000**	**2.4275**	**2.4275**	**2.0000e-005**	**3.4000e-004**	**2.5300**

3.3 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-004	2.4000e-003	1.9100e-003	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	**2.2000e-004**	**2.4000e-003**	**1.9100e-003**	**0.0000**	**2.7000e-004**	**8.0000e-005**	**3.5000e-004**	**3.0000e-005**	**8.0000e-005**	**1.1000e-004**	**0.0000**	**0.4274**	**0.4274**	**1.4000e-004**	**0.0000**	**0.4309**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0150	0.0150	0.0000	0.0000	0.0152
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0150**	**0.0150**	**0.0000**	**0.0000**	**0.0152**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1000e-004	0.0000	1.1000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-004	2.4000e-003	1.9100e-003	0.0000		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	0.4274	0.4274	1.4000e-004	0.0000	0.4309
Total	**2.2000e-004**	**2.4000e-003**	**1.9100e-003**	**0.0000**	**1.1000e-004**	**8.0000e-005**	**1.9000e-004**	**1.0000e-005**	**8.0000e-005**	**9.0000e-005**	**0.0000**	**0.4274**	**0.4274**	**1.4000e-004**	**0.0000**	**0.4309**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	0.0000	5.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0150	0.0150	0.0000	0.0000	0.0152
Total	**1.0000e-005**	**0.0000**	**5.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0150**	**0.0150**	**0.0000**	**0.0000**	**0.0152**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0276	0.2741	0.3514	5.7000e-004		0.0121	0.0121		0.0111	0.0111	0.0000	50.1479	50.1479	0.0162	0.0000	50.5533
Total	**0.0276**	**0.2741**	**0.3514**	**5.7000e-004**		**0.0121**	**0.0121**		**0.0111**	**0.0111**	**0.0000**	**50.1479**	**50.1479**	**0.0162**	**0.0000**	**50.5533**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	8.8200e-003	2.5100e-003	4.0000e-005	1.3200e-003	6.0000e-005	1.3800e-003	3.8000e-004	5.0000e-005	4.4000e-004	0.0000	3.7261	3.7261	2.0000e-005	5.6000e-004	3.8940
Worker	1.2400e-003	7.5000e-004	9.8300e-003	3.0000e-005	3.9800e-003	2.0000e-005	4.0000e-003	1.0600e-003	2.0000e-005	1.0800e-003	0.0000	3.0085	3.0085	8.0000e-005	8.0000e-005	3.0334
Total	**1.4400e-003**	**9.5700e-003**	**0.0123**	**7.0000e-005**	**5.3000e-003**	**8.0000e-005**	**5.3800e-003**	**1.4400e-003**	**7.0000e-005**	**1.5200e-003**	**0.0000**	**6.7346**	**6.7346**	**1.0000e-004**	**6.4000e-004**	**6.9274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0276	0.2741	0.3514	5.7000e-004		0.0121	0.0121		0.0111	0.0111	0.0000	50.1478	50.1478	0.0162	0.0000	50.5533
Total	**0.0276**	**0.2741**	**0.3514**	**5.7000e-004**		**0.0121**	**0.0121**		**0.0111**	**0.0111**	**0.0000**	**50.1478**	**50.1478**	**0.0162**	**0.0000**	**50.5533**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e-004	8.8200e-003	2.5100e-003	4.0000e-005	1.2700e-003	6.0000e-005	1.3200e-003	3.7000e-004	5.0000e-005	4.2000e-004	0.0000	3.7261	3.7261	2.0000e-005	5.6000e-004	3.8940
Worker	1.2400e-003	7.5000e-004	9.8300e-003	3.0000e-005	3.7800e-003	2.0000e-005	3.7900e-003	1.0100e-003	2.0000e-005	1.0200e-003	0.0000	3.0085	3.0085	8.0000e-005	8.0000e-005	3.0334
Total	**1.4400e-003**	**9.5700e-003**	**0.0123**	**7.0000e-005**	**5.0500e-003**	**8.0000e-005**	**5.1100e-003**	**1.3800e-003**	**7.0000e-005**	**1.4400e-003**	**0.0000**	**6.7346**	**6.7346**	**1.0000e-004**	**6.4000e-004**	**6.9274**

3.5 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.4000e-003	0.0000	5.4000e-003	2.5800e-003	0.0000	2.5800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	8.7300e-003	5.3900e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.2000e-004	3.2000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2480
Total	**8.3000e-004**	**8.7300e-003**	**5.3900e-003**	**1.0000e-005**	**5.4000e-003**	**3.5000e-004**	**5.7500e-003**	**2.5800e-003**	**3.2000e-004**	**2.9000e-003**	**0.0000**	**1.2380**	**1.2380**	**4.0000e-004**	**0.0000**	**1.2480**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	9.5200e-003	2.0000e-003	4.0000e-005	1.3100e-003	9.0000e-005	1.4000e-003	3.6000e-004	9.0000e-005	4.5000e-004	0.0000	4.1988	4.1988	2.0000e-005	6.6000e-004	4.3962
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0481	0.0481	0.0000	0.0000	0.0485
Total	**1.8000e-004**	**9.5300e-003**	**2.1600e-003**	**4.0000e-005**	**1.3700e-003**	**9.0000e-005**	**1.4600e-003**	**3.8000e-004**	**9.0000e-005**	**4.7000e-004**	**0.0000**	**4.2470**	**4.2470**	**2.0000e-005**	**6.6000e-004**	**4.4447**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3100e-003	0.0000	2.3100e-003	1.1000e-003	0.0000	1.1000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.3000e-004	8.7300e-003	5.3900e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.2000e-004	3.2000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2480
Total	**8.3000e-004**	**8.7300e-003**	**5.3900e-003**	**1.0000e-005**	**2.3100e-003**	**3.5000e-004**	**2.6600e-003**	**1.1000e-003**	**3.2000e-004**	**1.4200e-003**	**0.0000**	**1.2380**	**1.2380**	**4.0000e-004**	**0.0000**	**1.2480**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	9.5200e-003	2.0000e-003	4.0000e-005	1.2500e-003	9.0000e-005	1.3500e-003	3.5000e-004	9.0000e-005	4.3000e-004	0.0000	4.1988	4.1988	2.0000e-005	6.6000e-004	4.3962
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0481	0.0481	0.0000	0.0000	0.0485
Total	**1.8000e-004**	**9.5300e-003**	**2.1600e-003**	**4.0000e-005**	**1.3100e-003**	**9.0000e-005**	**1.4100e-003**	**3.7000e-004**	**9.0000e-005**	**4.5000e-004**	**0.0000**	**4.2470**	**4.2470**	**2.0000e-005**	**6.6000e-004**	**4.4447**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	7.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1600e-003**	**0.0123**	**0.0176**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	8.8000e-004	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2708	0.2708	1.0000e-005	1.0000e-005	0.2730
Total	**1.1000e-004**	**7.0000e-005**	**8.8000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2708**	**0.2708**	**1.0000e-005**	**1.0000e-005**	**0.2730**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.4100e-003	0.0123	0.0176	3.0000e-005		5.5000e-004	5.5000e-004		5.1000e-004	5.1000e-004	0.0000	2.3502	2.3502	6.8000e-004	0.0000	2.3673
Paving	7.5000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.1600e-003**	**0.0123**	**0.0176**	**3.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.1000e-004**	**5.1000e-004**	**0.0000**	**2.3502**	**2.3502**	**6.8000e-004**	**0.0000**	**2.3673**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	7.0000e-005	8.8000e-004	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2708	0.2708	1.0000e-005	1.0000e-005	0.2730
Total	**1.1000e-004**	**7.0000e-005**	**8.8000e-004**	**0.0000**	**3.4000e-004**	**0.0000**	**3.4000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2708**	**0.2708**	**1.0000e-005**	**1.0000e-005**	**0.2730**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3000e-004	2.8600e-003	4.5200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6392
Total	**5.5900e-003**	**2.8600e-003**	**4.5200e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6392**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.0000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0301	0.0301	0.0000	0.0000	0.0303
Total	**1.0000e-005**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0301**	**0.0301**	**0.0000**	**0.0000**	**0.0303**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	5.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3000e-004	2.8600e-003	4.5200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.6383	0.6383	3.0000e-005	0.0000	0.6392
Total	**5.5900e-003**	**2.8600e-003**	**4.5200e-003**	**1.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.6383**	**0.6383**	**3.0000e-005**	**0.0000**	**0.6392**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.0000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0301	0.0301	0.0000	0.0000	0.0303
Total	**1.0000e-005**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0301**	**0.0301**	**0.0000**	**0.0000**	**0.0303**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.546418	0.052852	0.170546	0.142778	0.024223	0.005960	0.012686	0.016941	0.000462	0.000320	0.022535	0.001087	0.003193

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

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

Mitigated

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

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1200e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-004	1.7000e-004	0.0000	0.0000	1.8000e-004
Unmitigated	2.1200e-003	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-004	1.7000e-004	0.0000	0.0000	1.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-004	1.7000e-004	0.0000	0.0000	1.8000e-004
Total	**2.1300e-003**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0000**	**1.8000e-004**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	5.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.7000e-004	1.7000e-004	0.0000	0.0000	1.8000e-004
Total	**2.1300e-003**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0000**	**1.8000e-004**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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Tracy Wastewater Master Plan - San Joaquin County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Tracy Wastewater Master Plan

San Joaquin County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.36	Acre	0.36	15,463.80	0
Other Asphalt Surfaces	9.29	1000sqft	0.21	9,292.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2026
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Anticpated construction schedule

Demolition -

Grading -

Construction Off-road Equipment Mitigation - BAAQMD rule compliance

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	1,233.33

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.2413	17.8366	7.7840	0.0582	6.8173	0.4396	7.2569	2.9696	0.4078	3.3774	0.0000	6,047.8717	6,047.8717	0.4684	0.7288	6,276.7735
Maximum	**2.2413**	**17.8366**	**7.7840**	**0.0582**	**6.8173**	**0.4396**	**7.2569**	**2.9696**	**0.4078**	**3.3774**	**0.0000**	**6,047.8717**	**6,047.8717**	**0.4684**	**0.7288**	**6,276.7735**

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.2413	17.8366	7.7840	0.0582	3.6596	0.4396	4.0992	1.4754	0.4078	1.8832	0.0000	6,047.8717	6,047.8717	0.4684	0.7288	6,276.7735
Maximum	**2.2413**	**17.8366**	**7.7840**	**0.0582**	**3.6596**	**0.4396**	**4.0992**	**1.4754**	**0.4078**	**1.8832**	**0.0000**	**6,047.8717**	**6,047.8717**	**0.4684**	**0.7288**	**6,276.7735**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**46.32**	**0.00**	**43.51**	**50.32**	**0.00**	**44.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**	**0.0000**	**2.2500e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**	**0.0000**	**2.2500e-003**

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

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2025	1/14/2025	5	10	
2	Site Preparation	Site Preparation	1/15/2025	1/15/2025	5	1	
3	Building Construction	Building Construction	1/18/2025	6/6/2025	5	100	
4	Grading	Grading	1/16/2025	1/17/2025	5	2	
5	Paving	Paving	6/7/2025	6/13/2025	5	5	
6	Architectural Coating	Architectural Coating	6/14/2025	6/20/2025	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.57

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,485 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	78.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	154.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7057	0.0000	1.7057	0.2583	0.0000	0.2583			0.0000			0.0000
Off-Road	0.5743	5.1008	7.3641	0.0120		0.2102	0.2102		0.2008	0.2008		1,149.1195	1,149.1195	0.2060		1,154.2705
Total	**0.5743**	**5.1008**	**7.3641**	**0.0120**	**1.7057**	**0.2102**	**1.9159**	**0.2583**	**0.2008**	**0.4591**		**1,149.1195**	**1,149.1195**	**0.2060**		**1,154.2705**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0168	0.9210	0.2011	4.4200e-003	0.1366	9.2200e-003	0.1458	0.0375	8.8200e-003	0.0463		468.6005	468.6005	2.6100e-003	0.0737	490.6284
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0136	0.2189	6.9000e-004	0.0822	3.5000e-004	0.0825	0.0218	3.3000e-004	0.0221		71.5566	71.5566	1.5900e-003	1.6000e-003	72.0718
Total	**0.0446**	**0.9346**	**0.4199**	**5.1100e-003**	**0.2188**	**9.5700e-003**	**0.2283**	**0.0593**	**9.1500e-003**	**0.0684**		**540.1571**	**540.1571**	**4.2000e-003**	**0.0753**	**562.7002**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7292	0.0000	0.7292	0.1104	0.0000	0.1104			0.0000			0.0000
Off-Road	0.5743	5.1008	7.3641	0.0120		0.2102	0.2102		0.2008	0.2008	0.0000	1,149.1195	1,149.1195	0.2060		1,154.2705
Total	**0.5743**	**5.1008**	**7.3641**	**0.0120**	**0.7292**	**0.2102**	**0.9394**	**0.1104**	**0.2008**	**0.3113**	**0.0000**	**1,149.1195**	**1,149.1195**	**0.2060**		**1,154.2705**

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0168	0.9210	0.2011	4.4200e-003	0.1304	9.2200e-003	0.1396	0.0359	8.8200e-003	0.0448		468.6005	468.6005	2.6100e-003	0.0737	490.6284
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0278	0.0136	0.2189	6.9000e-004	0.0779	3.5000e-004	0.0782	0.0207	3.3000e-004	0.0211		71.5566	71.5566	1.5900e-003	1.6000e-003	72.0718
Total	**0.0446**	**0.9346**	**0.4199**	**5.1100e-003**	**0.2083**	**9.5700e-003**	**0.2179**	**0.0567**	**9.1500e-003**	**0.0658**		**540.1571**	**540.1571**	**4.2000e-003**	**0.0753**	**562.7002**

3.3 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4432	4.7918	3.8238	9.7300e-003		0.1654	0.1654		0.1521	0.1521		942.2955	942.2955	0.3048		949.9144
Total	**0.4432**	**4.7918**	**3.8238**	**9.7300e-003**	**0.5303**	**0.1654**	**0.6956**	**0.0573**	**0.1521**	**0.2094**		**942.2955**	**942.2955**	**0.3048**		**949.9144**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0139	6.8100e-003	0.1094	3.4000e-004	0.0411	1.8000e-004	0.0413	0.0109	1.6000e-004	0.0111		35.7783	35.7783	8.0000e-004	8.0000e-004	36.0359
Total	**0.0139**	**6.8100e-003**	**0.1094**	**3.4000e-004**	**0.0411**	**1.8000e-004**	**0.0413**	**0.0109**	**1.6000e-004**	**0.0111**		**35.7783**	**35.7783**	**8.0000e-004**	**8.0000e-004**	**36.0359**

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4432	4.7918	3.8238	9.7300e-003		0.1654	0.1654		0.1521	0.1521	0.0000	942.2955	942.2955	0.3048		949.9144
Total	**0.4432**	**4.7918**	**3.8238**	**9.7300e-003**	**0.2267**	**0.1654**	**0.3920**	**0.0245**	**0.1521**	**0.1766**	**0.0000**	**942.2955**	**942.2955**	**0.3048**		**949.9144**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0139	6.8100e-003	0.1094	3.4000e-004	0.0389	1.8000e-004	0.0391	0.0104	1.6000e-004	0.0105		35.7783	35.7783	8.0000e-004	8.0000e-004	36.0359
Total	**0.0139**	**6.8100e-003**	**0.1094**	**3.4000e-004**	**0.0389**	**1.8000e-004**	**0.0391**	**0.0104**	**1.6000e-004**	**0.0105**		**35.7783**	**35.7783**	**8.0000e-004**	**8.0000e-004**	**36.0359**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5510	5.4820	7.0282	0.0114		0.2413	0.2413		0.2220	0.2220		1,105.5711	1,105.5711	0.3576		1,114.5102
Total	**0.5510**	**5.4820**	**7.0282**	**0.0114**		**0.2413**	**0.2413**		**0.2220**	**0.2220**		**1,105.5711**	**1,105.5711**	**0.3576**		**1,114.5102**

Date: 5/12/2022 4:53 PM

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1700e-003	0.1690	0.0494	7.8000e-004	0.0271	1.1400e-003	0.0283	7.8100e-003	1.0900e-003	8.9000e-003		82.0795	82.0795	3.9000e-004	0.0124	85.7764
Worker	0.0278	0.0136	0.2189	6.9000e-004	0.0822	3.5000e-004	0.0825	0.0218	3.3000e-004	0.0221		71.5566	71.5566	1.5900e-003	1.6000e-003	72.0718
Total	**0.0320**	**0.1826**	**0.2683**	**1.4700e-003**	**0.1093**	**1.4900e-003**	**0.1108**	**0.0296**	**1.4200e-003**	**0.0310**		**153.6361**	**153.6361**	**1.9800e-003**	**0.0140**	**157.8482**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5510	5.4820	7.0282	0.0114		0.2413	0.2413		0.2220	0.2220	0.0000	1,105.5711	1,105.5711	0.3576		1,114.5102
Total	**0.5510**	**5.4820**	**7.0282**	**0.0114**		**0.2413**	**0.2413**		**0.2220**	**0.2220**	**0.0000**	**1,105.5711**	**1,105.5711**	**0.3576**		**1,114.5102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1700e-003	0.1690	0.0494	7.8000e-004	0.0260	1.1400e-003	0.0271	7.5200e-003	1.0900e-003	8.6100e-003		82.0795	82.0795	3.9000e-004	0.0124	85.7764
Worker	0.0278	0.0136	0.2189	6.9000e-004	0.0779	3.5000e-004	0.0782	0.0207	3.3000e-004	0.0211		71.5566	71.5566	1.5900e-003	1.6000e-003	72.0718
Total	**0.0320**	**0.1826**	**0.2683**	**1.4700e-003**	**0.1038**	**1.4900e-003**	**0.1053**	**0.0283**	**1.4200e-003**	**0.0297**		**153.6361**	**153.6361**	**1.9800e-003**	**0.0140**	**157.8482**

Date: 5/12/2022 4:53 PM

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4030	0.0000	5.4030	2.5823	0.0000	2.5823			0.0000			0.0000
Off-Road	0.8350	8.7341	5.3948	0.0141		0.3484	0.3484		0.3205	0.3205		1,364.6987	1,364.6987	0.4414		1,375.7329
Total	**0.8350**	**8.7341**	**5.3948**	**0.0141**	**5.4030**	**0.3484**	**5.7513**	**2.5823**	**0.3205**	**2.9028**		**1,364.6987**	**1,364.6987**	**0.4414**		**1,375.7329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1655	9.0916	1.9848	0.0436	1.3486	0.0910	1.4396	0.3698	0.0870	0.4568		4,625.9278	4,625.9278	0.0257	0.7276	4,843.3832
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0223	0.0109	0.1751	5.5000e-004	0.0657	2.8000e-004	0.0660	0.0174	2.6000e-004	0.0177		57.2453	57.2453	1.2700e-003	1.2800e-003	57.6574
Total	**0.1878**	**9.1025**	**2.1599**	**0.0442**	**1.4143**	**0.0913**	**1.5056**	**0.3872**	**0.0873**	**0.4745**		**4,683.1731**	**4,683.1731**	**0.0270**	**0.7288**	**4,901.0406**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3098	0.0000	2.3098	1.1040	0.0000	1.1040			0.0000			0.0000
Off-Road	0.8350	8.7341	5.3948	0.0141		0.3484	0.3484		0.3205	0.3205	0.0000	1,364.6987	1,364.6987	0.4414		1,375.7329
Total	**0.8350**	**8.7341**	**5.3948**	**0.0141**	**2.3098**	**0.3484**	**2.6581**	**1.1040**	**0.3205**	**1.4245**	**0.0000**	**1,364.6987**	**1,364.6987**	**0.4414**		**1,375.7329**

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1655	9.0916	1.9848	0.0436	1.2875	0.0910	1.3785	0.3548	0.0870	0.4419		4,625.9278	4,625.9278	0.0257	0.7276	4,843.3832
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0223	0.0109	0.1751	5.5000e-004	0.0623	2.8000e-004	0.0626	0.0166	2.6000e-004	0.0169		57.2453	57.2453	1.2700e-003	1.2800e-003	57.6574
Total	**0.1878**	**9.1025**	**2.1599**	**0.0442**	**1.3498**	**0.0913**	**1.4410**	**0.3714**	**0.0873**	**0.4587**		**4,683.1731**	**4,683.1731**	**0.0270**	**0.7288**	**4,901.0406**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8625**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**		**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0501	0.0245	0.3940	1.2400e-003	0.1479	6.4000e-004	0.1485	0.0392	5.9000e-004	0.0398		128.8019	128.8019	2.8700e-003	2.8700e-003	129.7292
Total	**0.0501**	**0.0245**	**0.3940**	**1.2400e-003**	**0.1479**	**6.4000e-004**	**0.1485**	**0.0392**	**5.9000e-004**	**0.0398**		**128.8019**	**128.8019**	**2.8700e-003**	**2.8700e-003**	**129.7292**

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8625**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**	**0.0000**	**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0501	0.0245	0.3940	1.2400e-003	0.1402	6.4000e-004	0.1408	0.0373	5.9000e-004	0.0379		128.8019	128.8019	2.8700e-003	2.8700e-003	129.7292
Total	**0.0501**	**0.0245**	**0.3940**	**1.2400e-003**	**0.1402**	**6.4000e-004**	**0.1408**	**0.0373**	**5.9000e-004**	**0.0379**		**128.8019**	**128.8019**	**2.8700e-003**	**2.8700e-003**	**129.7292**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.0649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**2.2358**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Date: 5/12/2022 4:53 PM

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	2.7200e-003	0.0438	1.4000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4200e-003		14.3113	14.3113	3.2000e-004	3.2000e-004	14.4144
Total	**5.5700e-003**	**2.7200e-003**	**0.0438**	**1.4000e-004**	**0.0164**	**7.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4200e-003**		**14.3113**	**14.3113**	**3.2000e-004**	**3.2000e-004**	**14.4144**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.0649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.2358**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5700e-003	2.7200e-003	0.0438	1.4000e-004	0.0156	7.0000e-005	0.0156	4.1500e-003	7.0000e-005	4.2100e-003		14.3113	14.3113	3.2000e-004	3.2000e-004	14.4144
Total	**5.5700e-003**	**2.7200e-003**	**0.0438**	**1.4000e-004**	**0.0156**	**7.0000e-005**	**0.0156**	**4.1500e-003**	**7.0000e-005**	**4.2100e-003**		**14.3113**	**14.3113**	**3.2000e-004**	**3.2000e-004**	**14.4144**

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.546418	0.052852	0.170546	0.142778	0.024223	0.005960	0.012686	0.016941	0.000462	0.000320	0.022535	0.001087	0.003193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Unmitigated	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**		**2.2500e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**		**2.2500e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

Tracy Wastewater Master Plan - San Joaquin County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Tracy Wastewater Master Plan

San Joaquin County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.36	Acre	0.36	15,463.80	0
Other Asphalt Surfaces	9.29	1000sqft	0.21	9,292.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	3			**Operational Year**	2026
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Anticpated construction schedule

Demolition -

Grading -

Construction Off-road Equipment Mitigation - BAAQMD rule compliance

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblGrading	MaterialExported	0.00	1,233.33

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.2410	18.4752	7.7677	0.0582	6.8173	0.4397	7.2570	2.9696	0.4079	3.3775	0.0000	6,048.2494	6,048.2494	0.4680	0.7299	6,277.4719
Maximum	**2.2410**	**18.4752**	**7.7677**	**0.0582**	**6.8173**	**0.4397**	**7.2570**	**2.9696**	**0.4079**	**3.3775**	**0.0000**	**6,048.2494**	**6,048.2494**	**0.4680**	**0.7299**	**6,277.4719**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.2410	18.4752	7.7677	0.0582	3.6596	0.4397	4.0993	1.4754	0.4079	1.8833	0.0000	6,048.2494	6,048.2494	0.4680	0.7299	6,277.4719
Maximum	**2.2410**	**18.4752**	**7.7677**	**0.0582**	**3.6596**	**0.4397**	**4.0993**	**1.4754**	**0.4079**	**1.8833**	**0.0000**	**6,048.2494**	**6,048.2494**	**0.4680**	**0.7299**	**6,277.4719**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**46.32**	**0.00**	**43.51**	**50.32**	**0.00**	**44.24**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**	**0.0000**	**2.2500e-003**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**	**0.0000**	**2.2500e-003**

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

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2025	1/14/2025	5	10	
2	Site Preparation	Site Preparation	1/15/2025	1/15/2025	5	1	
3	Building Construction	Building Construction	1/18/2025	6/6/2025	5	100	
4	Grading	Grading	1/16/2025	1/17/2025	5	2	
5	Paving	Paving	6/7/2025	6/13/2025	5	5	
6	Architectural Coating	Architectural Coating	6/14/2025	6/20/2025	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.57

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,485 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	78.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	154.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.7057	0.0000	1.7057	0.2583	0.0000	0.2583			0.0000			0.0000
Off-Road	0.5743	5.1008	7.3641	0.0120		0.2102	0.2102		0.2008	0.2008		1,149.1195	1,149.1195	0.2060		1,154.2705
Total	**0.5743**	**5.1008**	**7.3641**	**0.0120**	**1.7057**	**0.2102**	**1.9159**	**0.2583**	**0.2008**	**0.4591**		**1,149.1195**	**1,149.1195**	**0.2060**		**1,154.2705**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0156	0.9854	0.2049	4.4200e-003	0.1366	9.2300e-003	0.1458	0.0375	8.8300e-003	0.0463		469.1948	469.1948	2.5500e-003	0.0738	491.2496
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0165	0.1988	6.2000e-004	0.0822	3.5000e-004	0.0825	0.0218	3.3000e-004	0.0221		64.6946	64.6946	1.8300e-003	1.8100e-003	65.2803
Total	**0.0419**	**1.0019**	**0.4037**	**5.0400e-003**	**0.2188**	**9.5800e-003**	**0.2283**	**0.0593**	**9.1600e-003**	**0.0684**		**533.8894**	**533.8894**	**4.3800e-003**	**0.0756**	**556.5298**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7292	0.0000	0.7292	0.1104	0.0000	0.1104			0.0000			0.0000
Off-Road	0.5743	5.1008	7.3641	0.0120		0.2102	0.2102		0.2008	0.2008	0.0000	1,149.1195	1,149.1195	0.2060		1,154.2705
Total	**0.5743**	**5.1008**	**7.3641**	**0.0120**	**0.7292**	**0.2102**	**0.9394**	**0.1104**	**0.2008**	**0.3113**	**0.0000**	**1,149.1195**	**1,149.1195**	**0.2060**		**1,154.2705**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0156	0.9854	0.2049	4.4200e-003	0.1304	9.2300e-003	0.1397	0.0359	8.8300e-003	0.0448		469.1948	469.1948	2.5500e-003	0.0738	491.2496
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0263	0.0165	0.1988	6.2000e-004	0.0779	3.5000e-004	0.0782	0.0207	3.3000e-004	0.0211		64.6946	64.6946	1.8300e-003	1.8100e-003	65.2803
Total	**0.0419**	**1.0019**	**0.4037**	**5.0400e-003**	**0.2083**	**9.5800e-003**	**0.2179**	**0.0567**	**9.1600e-003**	**0.0658**		**533.8894**	**533.8894**	**4.3800e-003**	**0.0756**	**556.5298**

3.3 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4432	4.7918	3.8238	9.7300e-003		0.1654	0.1654		0.1521	0.1521		942.2955	942.2955	0.3048		949.9144
Total	**0.4432**	**4.7918**	**3.8238**	**9.7300e-003**	**0.5303**	**0.1654**	**0.6956**	**0.0573**	**0.1521**	**0.2094**		**942.2955**	**942.2955**	**0.3048**		**949.9144**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0131	8.2400e-003	0.0994	3.1000e-004	0.0411	1.8000e-004	0.0413	0.0109	1.6000e-004	0.0111		32.3473	32.3473	9.1000e-004	9.1000e-004	32.6401
Total	**0.0131**	**8.2400e-003**	**0.0994**	**3.1000e-004**	**0.0411**	**1.8000e-004**	**0.0413**	**0.0109**	**1.6000e-004**	**0.0111**		**32.3473**	**32.3473**	**9.1000e-004**	**9.1000e-004**	**32.6401**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4432	4.7918	3.8238	9.7300e-003		0.1654	0.1654		0.1521	0.1521	0.0000	942.2955	942.2955	0.3048		949.9144
Total	**0.4432**	**4.7918**	**3.8238**	**9.7300e-003**	**0.2267**	**0.1654**	**0.3920**	**0.0245**	**0.1521**	**0.1766**	**0.0000**	**942.2955**	**942.2955**	**0.3048**		**949.9144**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0131	8.2400e-003	0.0994	3.1000e-004	0.0389	1.8000e-004	0.0391	0.0104	1.6000e-004	0.0105		32.3473	32.3473	9.1000e-004	9.1000e-004	32.6401
Total	**0.0131**	**8.2400e-003**	**0.0994**	**3.1000e-004**	**0.0389**	**1.8000e-004**	**0.0391**	**0.0104**	**1.6000e-004**	**0.0105**		**32.3473**	**32.3473**	**9.1000e-004**	**9.1000e-004**	**32.6401**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5510	5.4820	7.0282	0.0114		0.2413	0.2413		0.2220	0.2220		1,105.5711	1,105.5711	0.3576		1,114.5102
Total	**0.5510**	**5.4820**	**7.0282**	**0.0114**		**0.2413**	**0.2413**		**0.2220**	**0.2220**		**1,105.5711**	**1,105.5711**	**0.3576**		**1,114.5102**

Date: 5/12/2022 4:55 PM

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9100e-003	0.1806	0.0512	7.8000e-004	0.0271	1.1400e-003	0.0283	7.8100e-003	1.0900e-003	8.9000e-003		82.2376	82.2376	3.8000e-004	0.0124	85.9438
Worker	0.0263	0.0165	0.1988	6.2000e-004	0.0822	3.5000e-004	0.0825	0.0218	3.3000e-004	0.0221		64.6946	64.6946	1.8300e-003	1.8100e-003	65.2803
Total	**0.0302**	**0.1971**	**0.2499**	**1.4000e-003**	**0.1093**	**1.4900e-003**	**0.1108**	**0.0296**	**1.4200e-003**	**0.0310**		**146.9322**	**146.9322**	**2.2100e-003**	**0.0142**	**151.2241**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5510	5.4820	7.0282	0.0114		0.2413	0.2413		0.2220	0.2220	0.0000	1,105.5711	1,105.5711	0.3576		1,114.5102
Total	**0.5510**	**5.4820**	**7.0282**	**0.0114**		**0.2413**	**0.2413**		**0.2220**	**0.2220**	**0.0000**	**1,105.5711**	**1,105.5711**	**0.3576**		**1,114.5102**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.9100e-003	0.1806	0.0512	7.8000e-004	0.0260	1.1400e-003	0.0271	7.5200e-003	1.0900e-003	8.6100e-003		82.2376	82.2376	3.8000e-004	0.0124	85.9438
Worker	0.0263	0.0165	0.1988	6.2000e-004	0.0779	3.5000e-004	0.0782	0.0207	3.3000e-004	0.0211		64.6946	64.6946	1.8300e-003	1.8100e-003	65.2803
Total	**0.0302**	**0.1971**	**0.2499**	**1.4000e-003**	**0.1038**	**1.4900e-003**	**0.1053**	**0.0283**	**1.4200e-003**	**0.0297**		**146.9322**	**146.9322**	**2.2100e-003**	**0.0142**	**151.2241**

Date: 5/12/2022 4:55 PM

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4030	0.0000	5.4030	2.5823	0.0000	2.5823			0.0000			0.0000
Off-Road	0.8350	8.7341	5.3948	0.0141		0.3484	0.3484		0.3205	0.3205		1,364.6987	1,364.6987	0.4414		1,375.7329
Total	**0.8350**	**8.7341**	**5.3948**	**0.0141**	**5.4030**	**0.3484**	**5.7513**	**2.5823**	**0.3205**	**2.9028**		**1,364.6987**	**1,364.6987**	**0.4414**		**1,375.7329**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1538	9.7279	2.0228	0.0437	1.3486	0.0911	1.4397	0.3698	0.0871	0.4570		4,631.7951	4,631.7951	0.0252	0.7285	4,849.5148
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0210	0.0132	0.1590	5.0000e-004	0.0657	2.8000e-004	0.0660	0.0174	2.6000e-004	0.0177		51.7557	51.7557	1.4600e-003	1.4500e-003	52.2242
Total	**0.1748**	**9.7411**	**2.1818**	**0.0442**	**1.4143**	**0.0914**	**1.5057**	**0.3872**	**0.0874**	**0.4746**		**4,683.5508**	**4,683.5508**	**0.0267**	**0.7299**	**4,901.7390**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3098	0.0000	2.3098	1.1040	0.0000	1.1040			0.0000			0.0000
Off-Road	0.8350	8.7341	5.3948	0.0141		0.3484	0.3484		0.3205	0.3205	0.0000	1,364.6987	1,364.6987	0.4414		1,375.7329
Total	**0.8350**	**8.7341**	**5.3948**	**0.0141**	**2.3098**	**0.3484**	**2.6581**	**1.1040**	**0.3205**	**1.4245**	**0.0000**	**1,364.6987**	**1,364.6987**	**0.4414**		**1,375.7329**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1538	9.7279	2.0228	0.0437	1.2875	0.0911	1.3786	0.3548	0.0871	0.4420		4,631.7951	4,631.7951	0.0252	0.7285	4,849.5148
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0210	0.0132	0.1590	5.0000e-004	0.0623	2.8000e-004	0.0626	0.0166	2.6000e-004	0.0169		51.7557	51.7557	1.4600e-003	1.4500e-003	52.2242
Total	**0.1748**	**9.7411**	**2.1818**	**0.0442**	**1.3498**	**0.0914**	**1.4412**	**0.3714**	**0.0874**	**0.4588**		**4,683.5508**	**4,683.5508**	**0.0267**	**0.7299**	**4,901.7390**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046		1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8625**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**		**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0473	0.0297	0.3578	1.1200e-003	0.1479	6.4000e-004	0.1485	0.0392	5.9000e-004	0.0398		116.4503	116.4503	3.2900e-003	3.2600e-003	117.5045
Total	**0.0473**	**0.0297**	**0.3578**	**1.1200e-003**	**0.1479**	**6.4000e-004**	**0.1485**	**0.0392**	**5.9000e-004**	**0.0398**		**116.4503**	**116.4503**	**3.2900e-003**	**3.2600e-003**	**117.5045**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5638	4.9206	7.0257	0.0113		0.2186	0.2186		0.2046	0.2046	0.0000	1,036.2711	1,036.2711	0.3019		1,043.8179
Paving	0.2987					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8625**	**4.9206**	**7.0257**	**0.0113**		**0.2186**	**0.2186**		**0.2046**	**0.2046**	**0.0000**	**1,036.2711**	**1,036.2711**	**0.3019**		**1,043.8179**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0473	0.0297	0.3578	1.1200e-003	0.1402	6.4000e-004	0.1408	0.0373	5.9000e-004	0.0379		116.4503	116.4503	3.2900e-003	3.2600e-003	117.5045
Total	**0.0473**	**0.0297**	**0.3578**	**1.1200e-003**	**0.1402**	**6.4000e-004**	**0.1408**	**0.0373**	**5.9000e-004**	**0.0379**		**116.4503**	**116.4503**	**3.2900e-003**	**3.2600e-003**	**117.5045**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.0649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**2.2358**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	3.3000e-003	0.0398	1.2000e-004	0.0164	7.0000e-005	0.0165	4.3600e-003	7.0000e-005	4.4200e-003		12.9389	12.9389	3.7000e-004	3.6000e-004	13.0561
Total	**5.2600e-003**	**3.3000e-003**	**0.0398**	**1.2000e-004**	**0.0164**	**7.0000e-005**	**0.0165**	**4.3600e-003**	**7.0000e-005**	**4.4200e-003**		**12.9389**	**12.9389**	**3.7000e-004**	**3.6000e-004**	**13.0561**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.0649					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**2.2358**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2600e-003	3.3000e-003	0.0398	1.2000e-004	0.0156	7.0000e-005	0.0156	4.1500e-003	7.0000e-005	4.2100e-003		12.9389	12.9389	3.7000e-004	3.6000e-004	13.0561
Total	**5.2600e-003**	**3.3000e-003**	**0.0398**	**1.2000e-004**	**0.0156**	**7.0000e-005**	**0.0156**	**4.1500e-003**	**7.0000e-005**	**4.2100e-003**		**12.9389**	**12.9389**	**3.7000e-004**	**3.6000e-004**	**13.0561**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.546418	0.052852	0.170546	0.142778	0.024223	0.005960	0.012686	0.016941	0.000462	0.000320	0.022535	0.001087	0.003193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Unmitigated	0.0117	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**		**2.2500e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.8300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.7700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.0000e-005	1.0000e-005	9.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.1100e-003	2.1100e-003	1.0000e-005		2.2500e-003
Total	**0.0117**	**1.0000e-005**	**9.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.1100e-003**	**2.1100e-003**	**1.0000e-005**		**2.2500e-003**

Tracy Wastewater Master Plan - San Joaquin County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet
Install Low Flow Kitchen Faucet
Install Low Flow Toilet
Install Low Flow Shower
Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation