DRAFT ENVIRONMENTAL IMPACT REPORT

FOR THE

CITY OF TRACY HOUSING REZONE PROGRAM AND GENERAL PLAN AMENDMENT

(SCH #2024060655)

JANUARY 2026

Prepared for:

City of Tracy
Community & Economic Development, Planning Division
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Tracy, CA 95376

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A Land Use Planning, Design, and Environmental Firm

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ES.1 PURPOSE

This Draft Environmental Impact Report (Draft EIR) was prepared in accordance with and in fulfillment of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. As described in CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses the potentially significant environmental impacts of a project. CEQA requires that an EIR be prepared by the agency with primary responsibility over the approval of a project (the lead agency). The City of Tracy (City) is the lead agency for the proposed City of Tracy Rezone Program and General Plan Amendment (proposed Project) EIR. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible and have the obligation to balance economic, environmental, and social factors.

This Draft EIR has been prepared according to CEQA requirements to evaluate the potential environmental impacts associated with the implementation of the Rezone Program and General Plan Amendment project. This Draft EIR also discusses alternatives to the proposed Project and proposes mitigation measures that would offset, minimize, or otherwise avoid potentially significant environmental impacts. This Draft EIR is intended to provide decision-makers and the public with information that enables consideration of the environmental consequences of the Rezone Program and General Plan Amendment project, and has been prepared in accordance with CEQA (California Public Resources Code [PRC] § 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3).

The project analyzed in this Draft EIR is implementation of the City of Tracy Rezone Program and General Plan Amendment project (proposed Project). The proposed Project is comprised of three key actions that can be summarized as:

- Rezone opportunity sites identified in the City's Housing Element to satisfy the City's Regional Housing Needs Allocation (RHNA) requirement plus a buffer for each of the income categories;
- Update the City's Zoning Code to allow for increased densities and establish a new zoning district to accommodate additional residential units; and
- Amend the City's General Plan, including updates to the Land Use, Safety, and Circulation Elements, and introduce a new General Plan Element for the topic of Environmental Justice in compliance with State law.

ES.2 INTRODUCTION

State law requires the City to have and maintain a general plan with specific contents in order to provide a vision for the City's future and inform local decisions about land use and development, including issues such as circulation, conservation, and safety.

The City of Tracy General Plan is a comprehensive land use and development policy document that establishes a vision for the future and series of policies to achieve that vision over time. The General Plan contains goals, objectives, policies and actions categorized into ten Elements (chapters). The current General Plan was last amended and updated in 2011. The Housing Element (HE) is published separately from the main document.

The Tracy Housing Element for the 2023-2031 update cycle for jurisdictions in the San Joaquin Council of Governments (SJCOG) region was adopted in 2025 as an amendment to the Tracy General Plan. The Housing Element update is mandated by State law. The Housing Element establishes goals and policies, and identifies future actions to address the existing and projected housing needs of Tracy. The goals, policies, and actions are required by state law to plan for the regional housing targets allocated to Tracy by SJCOG and the Department of Housing and Community Development for the period of 2023 to 2031 and to affirmatively further fair housing.

The Housing Element identifies how the City would accommodate development of 8,830 total housing units that were included in the City's Regional Housing Needs Allocation (RHNA) for 2023-2031, as shown in **Table ES-1**. In addition, the City has yet to complete the rezoning of 31.7 acres to meet the shortfall for the 5th Cycle Housing Element RHNA. The 31.7 acres consists of four parcels to be rezoned from Light Industrial to High Density Residential (HDR). This means that there is a carryover of 500 lower-income units from the previous cycle. With the 500 unit carryover lower-income units from the 5th Cycle, the City has a RHNA obligation of 9,330 units (5,373 lower-income). Under existing zoning, the City has realistic capacity for 1,126 lower income units and 655 moderate income units, creating a lower income shortfall of 3,747 units and a moderate-income shortfall of 520 units.[1]

TABLE ES-1: TRACY REGIONAL HOUSING NEEDS ALLOCATION (RHNA)

	UNITS BY INCOME GROUP[A]				TOTAL UNITS
	VERY LOW (0-50% AMI)	LOW (51-80% AMI)	MODERATE (81-120% AMI)	ABOVE MODERATE (>120% AMI)	
RHNA Allocation	2,994	1,879	1,175	2,782	8,830
% of Total	34%	21%	13%	32%	100%[b]

NOTES:

a. Units are grouped into categories based on the incomes of households accommodated and their relationship (percentage of) Area Median Income (AMI).

b. Percentages rounded to equal 100%.

SOURCE: SJCOG REGIONAL HOUSING NEEDS PLAN (RHNP), SEPTEMBER 22, 2022.

However, the City's adoption of the Housing Element did not implement specific changes to existing land use controls (e.g., zoning) or approve any physical development (e.g., construction of housing or infrastructure) that may be necessary to accommodate such development. As such, the adoption of the Housing Element did not result in any direct physical changes to the environment. The proposed Rezone Program and General Plan Amendment project now seeks to implement policies in the Housing Element and make physical changes to the City such that additional dwelling units can be constructed and the City can meet its RHNA requirement.

ES.3 PROJECT LOCATION AND SETTING

The City of Tracy is located in San Joaquin County east of the Coastal Range that separates California's Central Valley from the San Francisco Bay Area. The City lies 68 miles south of Sacramento and 60 miles east of San Francisco. Tracy is situated within a triangle created by the intersection of several Interstate

[1] City of Tracy, 2022. 2023-2031 Housing Element. Submitted to HCD November 22. P. V-7.

highways including I-205, I-580, and I-5, as shown on **Figure ES-1** and **Figure ES-2**. The City's strategic location along major interstate highways, access to railroads, and proximity to major markets like the Bay Area have fostered tremendous job growth and has become a bedroom community for the Bay Area.

The City is surrounded primarily by agricultural land to the north, south, and east. The community of Mountain House lies to the northwest. Agricultural and industrial land are to the west of the city. The Carnegie State Vehicular Recreation Area (SVRA) is southwest of the City.

The General Plan assesses two delineated areas known as the Sphere of Influence (SOI) and the Planning Area. A description of each in described below:

- **City Limits:** The city limits include the area within a City's corporate boundary, over which the City exercises land use authority and provides public services.
- **Sphere of Influence:** A Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO).
- **Planning Area:** The planning area is defined as all lands within the City Limits and SOI.

ES.4 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project.

"A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project."

In keeping with this requirement, the City's project objectives are as follows:

- Meet the requirements of State Housing Law by implementing zoning and land use changes, as called for in the City's 6th Cycle Housing Element.
- Update the City of Tracy General Plan Safety Element to address State requirements related to hazards, including flooding, fire, and emergency preparedness.
- Amend the Tracy General Plan to include a new Environmental Justice Element, consistent with the requirements of SB 1000.

ES.5 PROJECT DESCRIPTION

In order to accommodate the City's RHNA units plus a buffer for each of the income categories, the proposed Project would result in three distinct actions:

- Rezone opportunity sites identified in the Housing Element City's to satisfy the City's Regional Housing Needs Allocation (RHNA) requirement plus a buffer for each of the income categories;
- Update the City's Zoning Code to allow for increased densities and establish a new zoning district to accommodate additional residential units; and

- Amend the City's General Plan, including updates to the Land Use, Safety, and Circulation Elements, and introduce a new General Plan Element for the topic of Environmental Justice in compliance with State law.

OPPORTUNITY SITES REZONES

The Tracy Housing Element identified a targeted rezoning program to meet the identified unit shortfall for the 6th Cycle Housing Element RHNA. The rezones identified in the Housing Element total approximately 239 acres and would accommodate 6,588 units, as summarized in **Table ES-2**.

The City identified specific parcels throughout the city that are vacant, underutilized, or being projected to build out as a residential. The rezoning of these parcels will provide increased housing capacity in prime areas with excellent access to employment centers and educational facilities, as shown in **Table ES-3** and shown on **Figures ES-3a-e**.

TABLE ES-2: SUMMARY OF OPPORTUNITY SITES FOR REZONING

EXISTING ZONE	ACRES	VERY LOW UNITS	LOW UNITS	MODERATE UNITS	TOTAL UNITS
LDR	3.8			113	113
MDC	5.5	98	64		162
MDR	40.3	700	469		1,169
PUD	75.4	1,029	641	575	2,245
NS	3.2	59	37		96
I-205 – GC	7.9	146	91		237
I-205 – CC	19.6	357	227		584
M1	21.9	129	129	394	652
M1-TH	5.0	91	57		148
MDR-TH	15.0	276	171		447
GHC	1.1	17	12		29
M1 (to be rezoned to new MU-1)	40.3	141	141	424	706
Total	**239**	**3,043**	**2,039**	**1,506**	**6,588**

SOURCE: CITY OF TRACY, 2023-2031 HOUSING ELEMENT, TABLES IV-17 AND IV-18, ADOPTED MAY 2025. DE NOVO PLANNING GROUP, 2025.

ZONING CODE UPDATES

The proposed Project would also include Zoning Code revisions to support housing goals including the following specific updates:

- Accommodate HE Program 9: Provision of Adequate Sites.

  The following zones are proposed for increased densities:

  - Medium Density Residential (MDR) – from 5.9-12 du/ac to 5.9-20 du/ac
  - Medium Density Cluster (MDC) – from 5.9-12 du/ac to 5.9-20 du/ac
  - High Density Residential (HDR) – from 12-25 du/ac to 20-35 du/ac
  - General Highway Commercial (GHC) – from 12-25 du/ac to 20-35 du/ac
  - Establish a new Zoning District (MU-1) at 20-35 du/acre

- Accommodate HE Program 14: Zoning Ordinance Updates. The City will amend the Zoning Code to address the following to facilitate the development of a variety of housing types:
    - **Density Bonus:** The City's Density Bonus must be updated to reflect recent changes to State law, such as AB 1763, which made several changes to density bonus requirements for 100 percent affordable projects, and AB 2345, that further incentivizes the production of affordable housing.
    - **Residential Care Facilities:** In accordance with the Lanterman Act, amend the Zoning Ordinance to permit residential care facilities serving six or fewer persons as a single-family residential use and permitted by right in all residential zones. In addition, consistent with City practice, amend the Zoning Ordinance to allow residential care facilities of seven or more persons in all residential zones with a Conditional Use Permit. Objective conditions for approval will be established to ensure certainty in outcomes.
    - **Farmworker Housing:** The California Employee Housing Act further defines housing for agricultural workers consisting of 36 beds or 12 units be treated as an agricultural use and permitted where agricultural uses are permitted. The City of Tracy permits crop and tree farming in the A, LDR, MDC, MDR, and HDR zones. The City will amend the Zoning Ordinance to address the provision of farmworker housing consistent with the Employee Housing Act.
    - **Employee Housing:** The California Employee Housing Act requires that housing for six or fewer employees be treated as a regular residential use. The City will amend the Zoning Ordinance to address the provision of farmworker housing consistent with the Employee Housing Act.
    - **Low Barrier Navigation Center:** While the City is working on the Low Barrier Navigation Center on Arbor Avenue, the Zoning Ordinance does not address this type of facility. AB 101 requires cities to allow a Low Barrier Navigation Center development by right in areas zoned for mixed uses and nonresidential zones permitting multifamily uses if it meets specified requirements. The City will amend the Zoning Ordinance to be in compliance with AB 101.
    - **Emergency Shelter Parking Standards:** The Zoning Ordinance does not specify any parking requirements for emergency shelters. AB 139 specifies that local governments may impose a parking requirement, but that it shall only be an amount adequate for parking for shelter staff may not exceed the requirements for residential and nonresidential uses in the same zone. The City will amend the Zoning Ordinance to be in compliance with AB 139.
    - **Transitional and Supportive Housing:** State law (AB 2634 and SB 2) requires local jurisdictions to allow for transitional and supportive housing subject to the same standards as similar residential uses within the same zone. AB 2162 requires that supportive housing that meets specific criteria to be permitted by right in zones where multi-family and mixed-use developments are permitted. Specific criteria include the size of the project and percentage set aside for target population, and specified amount of floor area for supportive services, among others. For projects located within 0.5 mile from transit, no minimum parking requirements may be applied. The City will amend the Zoning Ordinance to be in compliance with these State laws.
    - **Parking Standards:** Amend the City's parking ordinance to reduce the number of off-street parking spaces required for new multi-family housing development projects.
    - **Definition of Family:** The City's current definition of "family" is "one or more persons occupying a single dwelling unit, under no more than one written or oral rental agreement."

This definition may act as a constraint on housing for persons with disabilities. The City will revisit this definition of "family" to ensure that it poses no negative impacts for persons with disabilities.

- **SB 35 and SB 330 Processing:** In compliance with State law, the City will establish written procedures for processing SB 35 and SB 330 development applications.
- **ADU Requirements:** Update the Zoning Code to comply with State requirements for ADUs.

GENERAL PLAN AMENDMENT

The City would undertake several necessary amendments to the General Plan, including updates to the Land Use, Safety, and Circulation Elements. In addition, the City will be including a new General Plan Element for the topic of Environmental Justice consistent with State planning law.

Each of these updates is briefly described below:

Land Use Element: The Land Use Element and Land Use Map will be updated for consistency with Housing Element site rezones to included appropriate and complementary land uses that support housing goals.

Circulation Element: The Circulation Element will be updated to be consistent with vehicle miles travelled (VMT) standards and thresholds for project level review. This update is intended to bring the element in line with statewide guidance related to assessing impacts relative to VMT as required under SB 743. The main component of the Circulation Element update will include incorporation of a citywide VMT tool to be used to assess and reduce impacts from future development projects within Tracy.

Safety Element: The City is preparing a targeted update to the General Plan Safety Element in coordination with the Housing Element and other identified updates. State of California legislation requires that the City's Safety Element be reviewed and updated as necessary alongside the City's Housing Element update. Proposed updates to the Safety Element include amending goals, policies, and objectives; integrating updated background information and mapping; and incorporating programs from other citywide planning documents. This targeted update will address policies related to flood, fire, emergency evacuation and preparation and climate resiliency and adaptation.

Environmental Justice Element. The update of two or more General Plan Elements triggers a State requirement to address environmental justice under the provisions of Senate Bill (SB) 1000. Therefore, the City is required to include environmental justice policies to ensure compliance with State law. This Element will identify goals and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity. This Element will also identify policies to promote civic engagement, and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

DEVELOPMENT AND BUILDOUT

The EIR will address buildout of the General Plan Land Use Map inclusive of the proposed Project's rezone program through 2045. Buildout under the proposed Project includes several components of growth. For the purposes of the analysis in this EIR, projected new growth in Tracy stems from the following growth factors:

Sites Rezones: The Tracy Housing Element has identified a targeted rezoning program to meet the identified unit shortfall for the 6th Cycle Housing Element RHNA. The rezones identified in the Housing Element total approximately 239 acres and would accommodate 6,588 units. Rezone sites are summarized in Table ES-2. The Inventory of rezone sites is shown in Figures ES-3a-e.

Updated Zoning Code: Targeted Density Increases in the Housing Element Update have been identified to accommodate the RHNA shortfall through increasing the permitted densities of existing multi-family zones, and the development of a new mixed use zoning district. The following Zoning Code amendments are proposed that would increase densities:

- MDR – from 5.9-12 du/ac to 5.9-20 du/ac
- MDC – from 5.9-12 du/ac to 5.9-20 du/ac
- HDR – from 12-25 du/ac to 20-35 du/ac
- GHC – from 12-25 du/ac to 20-35 du/ac
- Establish a new Zoning District (MU-1) at 20-35 du/acre

Other Citywide Buildout: Continued growth would occur through buildout of the existing General Land Use Map. The City would continue to develop housing, job generating uses, and community facilities throughout the life of the General Plan, typically on vacant and underutilized parcels, consistent with the existing General Plan Land Use Map designations. For planning purposes, a 20-year time horizon is assumed under this EIR's analysis and 2045 is assumed to be the future buildout year.

As shown in **Table ES-3**, buildout of the General Plan could yield a total of up to 51,008 housing units, a population of 149,298 people, and 90,916 jobs within the Planning Area by 2045. This represents development growth over existing conditions of up to 21,355 new dwelling units, and 50,995 new jobs.

TABLE ES-3. DEVELOPMENT CAPACITY

	POPULATION	HOUSING UNITS	JOBS	JOBS HOUSING RATIO
2024 Baseline (Existing Conditions)	96,076	29,653	39,921	1.35
Projected 2045 Total Buildout*	149,298	51,008	90,916	1.78
Total New Growth Over Existing Conditions 2024-2045	+53,223	+21,355	+50,995	

NOTES: *Total buildout includes development on vacant and underutilized parcels within Tracy that are not otherwise impacted or related to the proposed Rezone Program in addition to the development accommodated under the proposed Rezone Program.

SOURCES: DE NOVO PLANNING GROUP, 2024, 2023 SAN JOAQUIN COUNTY ASSESSOR DATA FILE, TRACY HOUSING ELEMENT INVENTORY SHAPEFILES, TRACY TRAVEL DEMAND MODEL (KIMLEY-HORN).

Growth projections should not be considered a prediction for growth, as the actual amount of development that will occur throughout the planning horizon of the General Plan is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, land turnover, and other factors. Additionally, new development and growth are largely dictated by existing development conditions. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

ES.6 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. Implementation of the proposed Project would result in significant unavoidable impacts to Transportation. The environmental effects of the proposed Project on various aspects of the environment are discussed in detail in Chapter 3, Environmental Impacts, Setting, and Mitigation Measures. The project-specific and cumulative impacts that cannot be avoided if the proposed Project is approved as proposed are listed below.

> **Impact 3.4-2:** Implementation of the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT). (Significant and Unavoidable)

ES.7 SUMMARY OF ALTERNATIVES TO THE PROPOSED PROJECT

ALTERNATIVE 1 – NO PROJECT (NO BUILD)

CEQA Guidelines Section 15126.6(e) requires an EIR to evaluate a "no project" alternative, which is defined as what would be reasonably expected to occur in the foreseeable future if the project were not approved.

Under Alternative 1, the City would continue to implement the existing General Plan including the City's existing General Plan Land Use Map, and no changes would be made to address updated General Plan Guidelines, or the requirements of State law.

Since adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions, as well as required housing element updates to address regional housing needs.

Alternative 1 would result in the continuation of existing conditions and development levels. **Table ES-4** shows the existing land use patterns associated with the existing General Plan within the City Limits and SOI.

TABLE ES-4: EXISTING GENERAL PLAN LAND USES

LAND USE DESIGNATION	CITY	SOI	TOTAL
	ACRES	ACRES	ACRES
Aggregate	9.69	159.84	169.53
Agriculture	--	676.25	676.25
Commercial	921.55	458.91	1,380.46
Downtown	114.62	--	114.62
Industrial	3,780.86	1,738.17	5,519.03
Office	590.76	--	590.76
Open Space	82.70	3,385.46	3,468.17
Park	644.03	199.05	843.08
Public Facilities	946.78	67.61	1,014.39
Residential High	254.80	31.45	286.24
Residential Low	4,501.97	161.77	4,663.74
Residential Medium	1,316.14	28.75	1,344.89
Residential Very Low	110.15	263.70	373.86
Traditional Residential - Ellis	191.68	--	191.68
Urban Reserve	112.13	1,961.81	2,073.94
Village Center	72.78	--	72.78
ROW	464.11	59.86	523.97
Grand Total	**14,114.76**	**9,192.62**	**23,307.38**

SOURCE: CITY OF TRACY GENERAL PLAN; SAN JOAQUIN COUNTY GIS. DENOVO PLANNING GROUP. MAP DATE: SEPTEMBER 11, 2024.

New growth would be allowed as envisioned under the existing General Plan, with land uses required to be consistent with the existing General Plan Land Use Map. Table ES-4 shows the growth associated with this alternative.

ALTERNATIVE 2 – SITES REZONE WITH REDUCED DENSITY

This alternative (Alternative 2) considers the same rezone sites as the proposed Project (as described in Chapter 2.0); however, the densities associated with the development sites and zoning designations would remain the same as the existing land use and zoning code standards for density ranges. This Alternative would rezone the same sites, but would not include the updates to the zoning code to accommodate HE Program 9. As described in the Project Description (Chapter 2.0) HE Program 9: Provision of Adequate Sites proposed the following zones for increased densities:

- Medium Density Residential (MDR) – from 5.9-12 du/ac to 5.9-20 du/ac
- Medium Density Cluster (MDC) – from 5.9-12 du/ac to 5.9-20 du/ac
- High Density Residential (HDR) – from 12-25 du/ac to 20-35 du/ac
- General Highway Commercial (GHC) – from 12-25 du/ac to 20-35 du/ac
- Establish a new Zoning District (MU-1) at 20-35 du/acre

Development allowed under Alternative 2 would result in fewer residential units when compared to the proposed Project as a result of decreased in density ranges to accommodate HE Program 9. The employment uses and total jobs would remain the same as the proposed Project.

See Chapter 4.0, Alternatives to the Proposed Project, for further analysis.

ES.8 REQUIRED APPROVALS

Actions to be taken by the City to adopt and implement the proposed Project include, but are not limited to:

- Adoption of General Plan amendments to re-designate the land uses for rezone sites, and to update General Plan Elements for compliance with state laws and internal consistency,
- Rezoning of sites, identified in the Tracy Housing Element, and
- Adoption of Zoning Ordinance amendments to accommodate the rezone sites and development standards identified by the Tracy Housing Element.

These proposed actions would require review and recommendation by the Planning Commission, followed by consideration and action by the City Council.

As the Lead Agency and as appropriate under CEQA, the City also intends the EIR to serve as the CEQA-required environmental documentation for consideration of the Project by other Responsible Agencies and Trustee Agencies which may have discretionary approval authority over the Project. Under the CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR (CEQA Guidelines Section 15381); and the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California (CEQA Guidelines Section 15386). While no Responsible Agencies and Trustee Agencies have been identified with approval actions associated with adoption of the Project, agencies may use the EIR when considering actions necessary for development on the identified sites. These agencies may include:

- California Department of Fish and Wildlife (CDFW);
- California Department of Transportation (Caltrans);
- Regional Water Quality Control Board (RWQCB);
- San Joaquin County Local Agency Formation Commission (LAFCo);
- U.S. Army Corps of Engineers (USACE); and/or
- U.S. Fish and Wildlife Service (USFWS).

ES.9 AREAS OF CONTROVERSY

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects.

Aspects of the proposed Project that could be of public concern include the following:

- Potential effects on known or previously undiscovered tribal cultural resources
- Impacts on air quality
- Land use compatibility, including increased residential density throughout the city
- Potential effects from existing hazardous materials, particularly in the Bow Tie area, on the proposed Project
- Provision of affordable housing
- Reducing greenhouse gas emissions and complying with the 2022 Scoping Plan for Achieving Carbon Neutrality through the reduction in vehicle miles traveled (VMT), transportation electrification, and building decarbonization
- Accurate reflection of existing land use plans and/or development agreements throughout the city such that the proposed Project can build on an accurate baseline scenario

In accordance with CEQA Guidelines Section 15082, the City of Tracy circulated a Notice of Preparation (NOP) of an EIR for the proposed Project on June 14, 2024 to the State Clearinghouse, State Responsible Agencies, State Trustee Agencies, Other Public Agencies, Organizations and Interested Persons. A public scoping meeting was held on July 10, 2024 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. The 30-day NOP public comment period concluded on July 15, 2024. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments received on the NOP by interested parties are presented in Appendix A.

The NOP identified potential for significant impacts on the environment related to the following topical areas:

- Air Quality
- Greenhouse Gas Emissions
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

The NOP also identified certain topical areas where impacts were found to be less than significant because implementation of the proposed Project would not create such impacts. These topical areas include forestry resources and mineral resources, and are discussed in Chapter 6, Effects Found not to be Significant, in this Draft EIR.

DISAGREEMENT AMONG EXPERTS

This Draft EIR contains substantial evidence to support all conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of Tracy is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize conflicting opinions of the experts, and include sufficient information to allow the public and decision makers to make an informed judgment about environmental consequences of the proposed Project.

POTENTIALLY CONTROVERSIAL ISSUES

It is also possible that evidence will be presented during the 45-day statutory Draft EIR public review period that may create disagreement. Decision makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, decision makers are not obligated to select the most environmentally preferable viewpoint. Decision makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision makers must consider comments received concerning adequacy of the Draft EIR and address any objections raised in these comments. However, decision makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft EIR, and can certify the Final EIR without needing to resolve disagreements among experts.

ES.10 PUBLIC REVIEW OF THE DRAFT EIR

The Draft EIR will be available for public review for 45 days, in accordance with PRC section 21161. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the Tracy City Council, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision makers for the Rezone Program and General Plan Amendment project.

Table ES-5 provides a summary of the proposed Project's impacts, mitigation measures if any, and level of significance.

TABLE ES-5: PROJECT IMPACTS AND PROPOSED MITIGATION MEASURES

IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
SECTION 3.1—AIR QUALITY			
Impact 3.1-1: Project implementation would not conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of criteria pollutants.	Less than Significant	None Required	Less than Significant
Impact 3.1-2: Project implementation would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None Required	Less than Significant
Impact 3.1-3: Project implementation would not result in other emissions such as those leading to odors adversely affecting a substantial number of people.	Less than Significant	None Required	Less than Significant
Impact 3.1-4: Implementation of the proposed Project, in combination with other cumulative development, would not conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of criteria pollutants.	Less than Significant	None Required	Less than Significant
Impact 3.1-5: Implementation of the proposed Project, in combination with other cumulative development, would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None Required	Less than Significant
Impact 3.1-6: Implementation of the proposed Project, in combination with other cumulative development, would not result in other emissions such as those leading to odors adversely affecting a substantial number of people.	Less than Significant	None Required	Less than Significant
SECTION 3.2—GREENHOUSE GAS EMISSIONS			
Impact 3.2-1: Project implementation has the potential to generate GHG emissions that could have a significant impact on the environment and/or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than Significant	None Required	Less than Significant
SECTION 3.3—NOISE			
Impact 3.3-1: The proposed Project would not generate 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	None Required	Less than Significant

IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
Impact 3.3-2: The proposed Project has the potential to generate excessive groundborne vibration or groundborne noise levels.	Potentially Significant	**Mitigation Measure 3.3-2:** Any compaction required less than 26 feet from adjacent structures should be accomplished by using static drum rollers which use weight instead of vibrations to achieve soil compaction. As an alternative to this requirement, pre-construction crack documentation and construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures.	Less than Significant
Impact 3.3-3: The proposed Project is located within two miles of Tracy Municipal Airport and would not expose people residing or working in the Project area to excessive noise levels.	Less than Significant	None Required	Less than Significant
Impact 3.3-4: The proposed Project, combined with cumulative development, would not expose existing noise-sensitive land uses to increased noise.	Less than Significant	None Required	Less than Significant
SECTION 3.4–TRANSPORTATION			
Impact 3.4-1: Implementation of the proposed Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than Significant	None Required	Less than Significant
Impact 3.4-2: Implementation of the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT).	Potentially Significant	None Available	Significant and Unavoidable
Impact 3.4-3: Implementation of the proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less than Significant	None Required	Less than Significant
Impact 3.4-4: Implementation of the proposed Project would not result in inadequate emergency access.	Less than Significant	None Required	Less than Significant

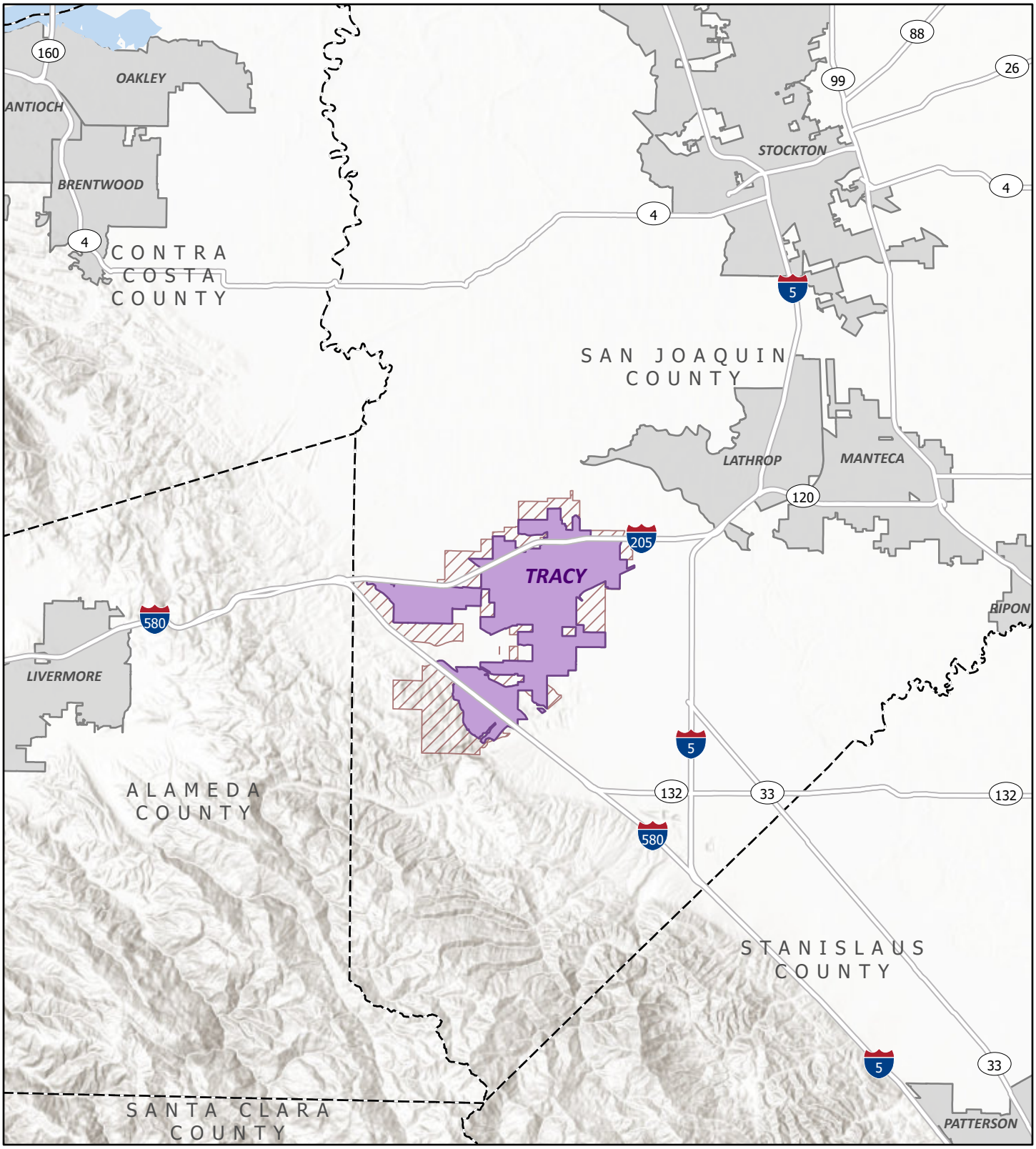
IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
Impact 3.4-5: Implementation of the proposed Project, in combination with other cumulative development, would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than Significant	None Required	Less than Significant
Impact 3.4-6: Implementation of the proposed Project, in combination with other cumulative development, would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT).	Less than Significant	None Required	Less than Significant
Impact 3.4-7: Implementation of the proposed Project, in combination with other cumulative development, would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less than Significant	None Required	Less than Significant
Impact 3.4-8: Implementation of the proposed Project, in combination with other cumulative development, would not result in inadequate emergency access.	Less than Significant	None Required	Less than Significant
SECTION 3.5—TRIBAL CULTURAL RESOURCES			
Impact 3.5-1: The proposed Project could 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: • Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or is • A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	**Mitigation Measure 3.5-1(a):** If any historical resources, cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s). Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.	Less than Significant

IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
		In addition, if the resource(s) identified is cultural or tribal in nature, the Confederated Villages of Lisjan shall be contacted to review and identify the resource, prior to work continuing at the discovery site. If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, would also be required and, if Native American resources are identified, shall be retained at the Project applicant's expense. **Mitigation Measure 3.5-1(b):** If human remains are discovered during the course of construction during any phase of the Project, work shall be halted at the site and at any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken: • The coroner shall contact the Native American Heritage Commission in order to ascertain the Most Likely Descendant (MLD) from the deceased individual. If a MLD is identified, the MLD, with the permission of the owner of the land, or his or her authorized representative, in accordance with the law, may inspect the site discovery site and recommend to the landowner, or his or her representative, means for the treatment or disposition, with appropriate dignity' of the human	

IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
		remains and any associated grave goods. The landowner has no legal obligation to allow the MLD accesses to the property for the purpose of making a recommendation. The MLD must complete their inspection and make their recommendation within 48 hours of their notification by the NAHC. The recommendation may include the scientific removal and analysis of human remains and items associated with Native American burials. The coroner shall make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. • The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs: o The Native American Heritage Commission and Confederated Villages of Lisjan is unable to identify a descendent. o The descendant identified fails to make a recommendation. o The City of Tracy or its authorized representative rejects the	

IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
		recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	
Impact 3.5-2: The proposed Project, in combination with other cumulative development, could 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: • Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or is • A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Potentially Significant	**Mitigation Measure 3.5-2:** Implement Mitigation Measure 3.5-1(a) and (b).	Less than Significant
SECTION 3.6—UTILITIES AND SERVICE SYSTEMS			
Impact 3.6-1: The proposed Project would not have the potential to result in a determination by the wastewater treatment and/or collection provider which serves the project that the provider does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less than Significant	None Required	Less than Significant
Impact 3.6-2: The proposed Project would not have the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	None Required	Less than Significant

IMPACTS	*LEVEL OF SIGNIFICANCE BEFORE MITIGATION*	*MITIGATION MEASURES*	*LEVEL OF SIGNIFICANCE AFTER MITIGATION*
Impact 3.6-3: The proposed Project, in combination with other cumulative development, would not exceed the provider's capacity to serve future projected demand in addition to the provider's existing commitments.	Less than Significant	None Required	Less than Significant
Impact 3.6-4: The proposed Project would not require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	None Required	Less than Significant
Impact 3.6-5: The proposed Project would not have the potential to have insufficient water supplies available to serve the Project from existing entitlements and resources.	Less than Significant	None Required	Less than Significant
Impact 3.6-6: The proposed Project, in combination with cumulative development, would not require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or have inadequate water supply.	Less than Significant	None Required	Less than Significant
Impact 3.6-7: The proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	None Required	Less than Significant
Impact 3.6-8: The proposed Project, in combination with other cumulative development, would not have the potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less than Significant	None Required	Less than Significant
Impact 3.6-9: The landfills that would serve the proposed Project have sufficient permitted capacity to accommodate the Project's solid waste disposal needs, and the proposed Project would comply with federal, State, and local statutes and regulations related to solid waste.	Less than Significant	None Required	Less than Significant
Impact 3.6-10: The landfills that would serve the proposed Project, in combination with other cumulative development, have sufficient permitted capacity to accommodate the Project's and cumulative developments' solid waste disposal needs, and will comply with federal, State, and local statutes and regulations related to solid waste.	Less than Significant	None Required	Less than Significant



Legend

- City of Tracy
- Tracy Sphere of Influence
- Other Incorporated Area
- County Boundary

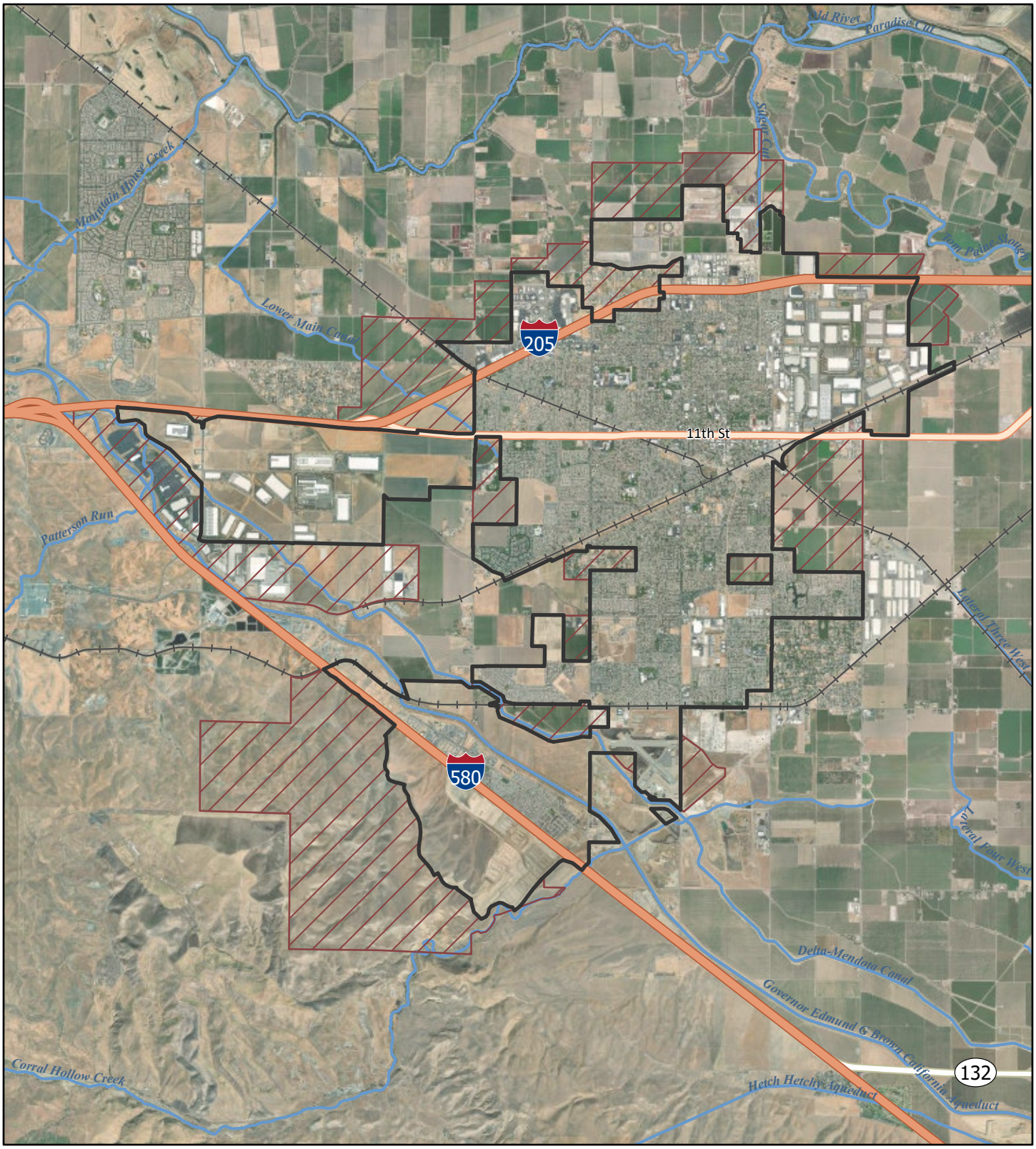
ES-1.

Regional Location

0 2½ 5
Miles

Sources: California State Geoportal; ArcGIS Online World Hillshade Map Service. Map date: September 4, 2024.

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Legend

- Tracy City Limits
- Tracy Sphere of Influence
- Railroad
- Rivers, Creeks, and Canals

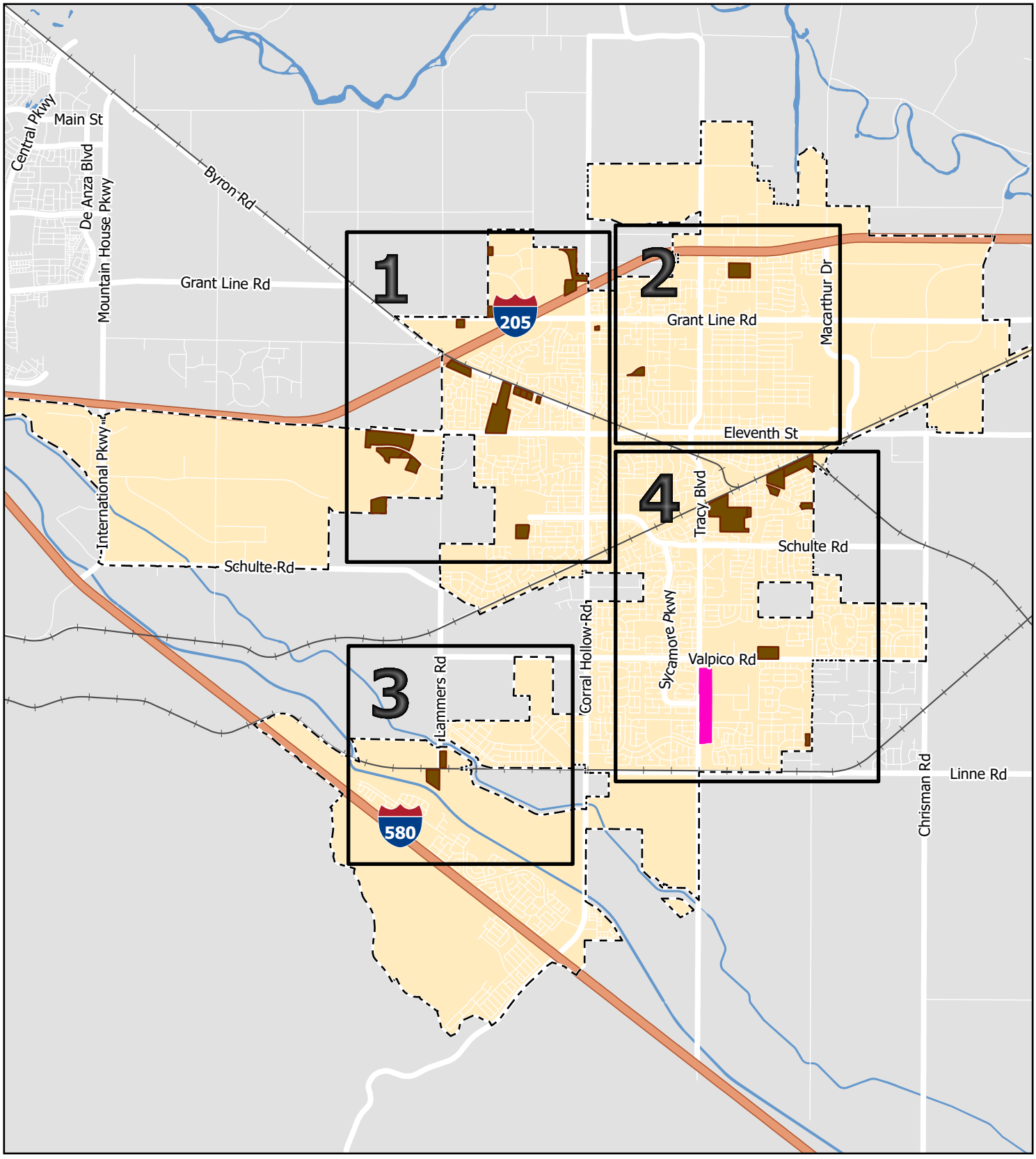
ES-2.

Project Location

0 ½ 1
Miles

Sources: San Joaquin County GIS; USGS Transportation and Hydrography Datasets; MAXAR Imagery 8/7/2023 . Map date: September 4, 2024.

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City of Tracy

Rezone Area

To be rezoned HDR - High Density Residential

To be rezoned MU1 - Mixed Use 1

Grid Map Extents*

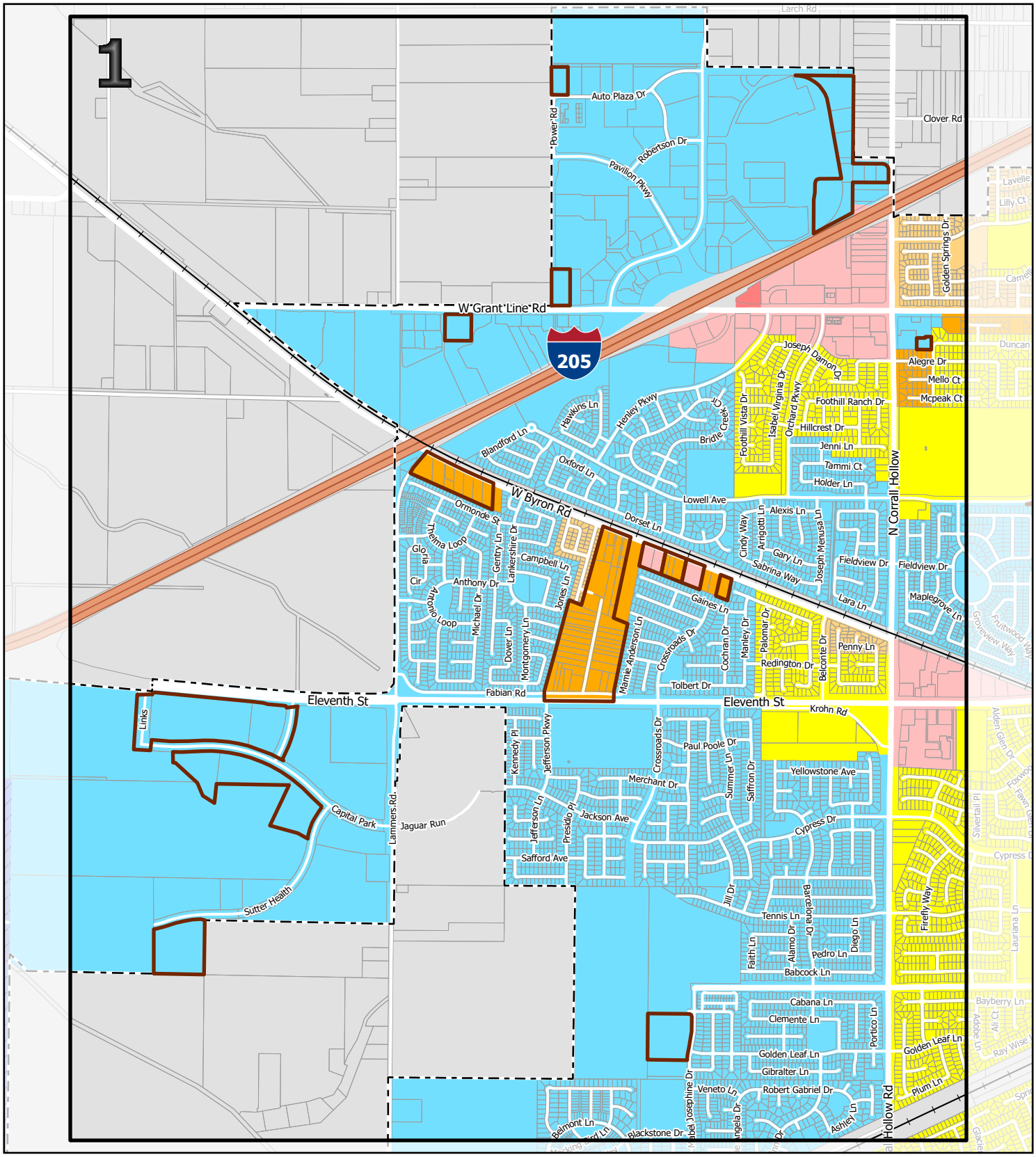
** See individual Grid Maps 1-4 for Rezone Area detail*

ES-3a.

Rezone Areas Index Map

0 ½ 1 Miles

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Legend

- Tracy City Limits

Rezone Area

- To be rezoned HDR - High Density Residential

Current Zoning Designation

- LDR -Low Density Residential
- MDR - Medium Density Residential
- MDC - Medium Density Cluster
- PUD - Planned Unit Development
- HS - Highway Service
- GHC - General Highway Commercial
- CRSP - Cordes Ranch Specific Plan

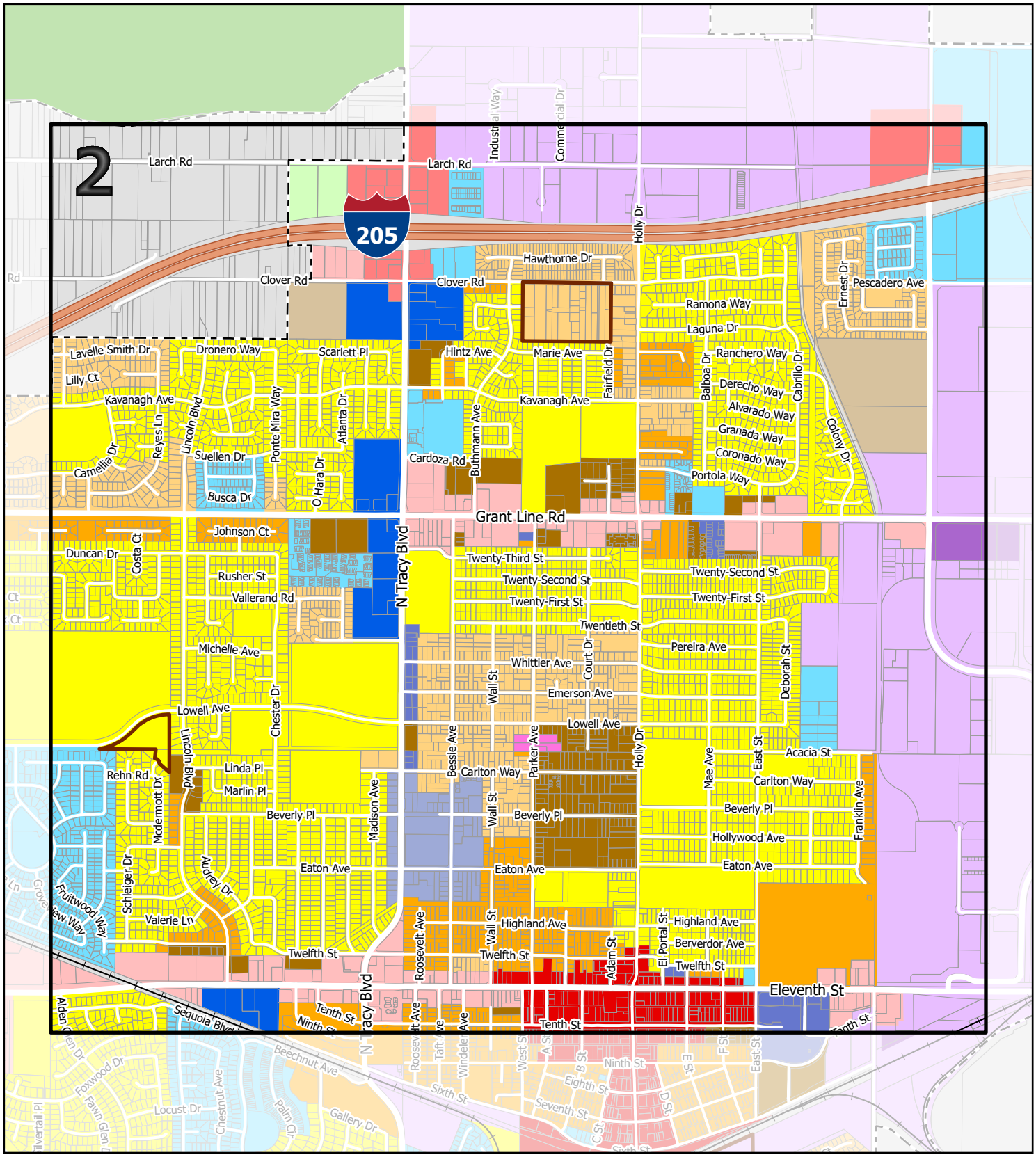
ES-3b.

Rezone Areas: Grid 1

Northwest Tracy

0 500 1,000 Feet

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Legend

- Tracy City Limits

Rezone Area

- To be rezoned HDR - High Density Residential

Current Zoning Designation

- LDR -Low Density Residential
- MDR - Medium Density Residential
- MDC - Medium Density Cluster
- HDR - High Density Residential
- RMH - Residential Mobile Home
- PUD - Planned Unit Development
- M1 - Light Industrial
- M2 - Heavy Industrial
- NS - Neighborhood Shopping
- CS - Community Shopping Center
- CBD - Central Business District
- HS - Highway Service
- GHC - General Highway Commercial
- MO - Medical Office
- POM - Professional Office Medical
- CRS - Community Recreation Support Services
- P - Park
- NEI - Northeast Industrial Areas Specific Plan

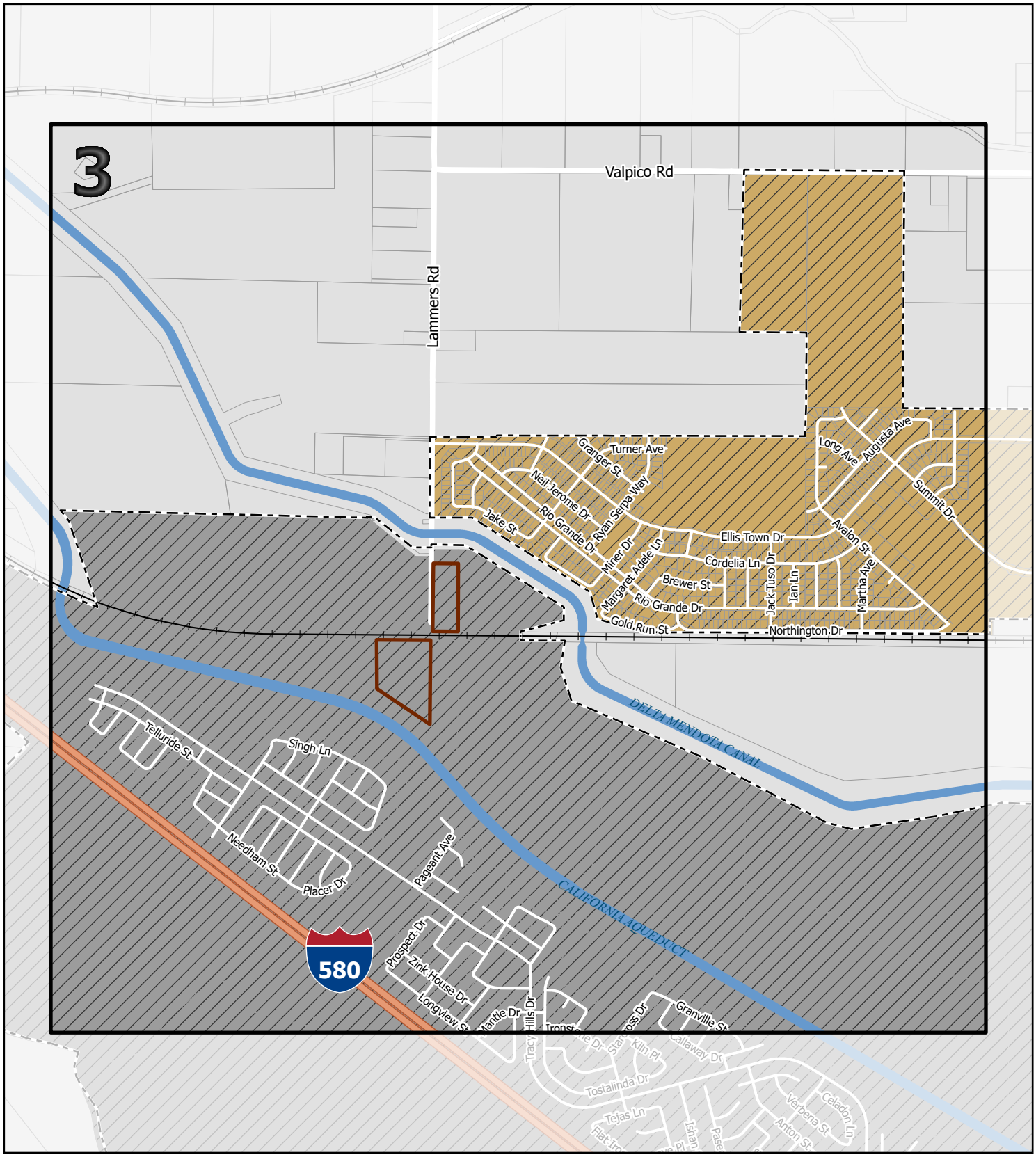
ES-3c.

Rezone Areas: Grid 2

North/Central Tracy

0 500 1,000 Feet

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Legend

Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

E -Ellis Park Specific Plan

THSP - Tracy Hills Specific Plan

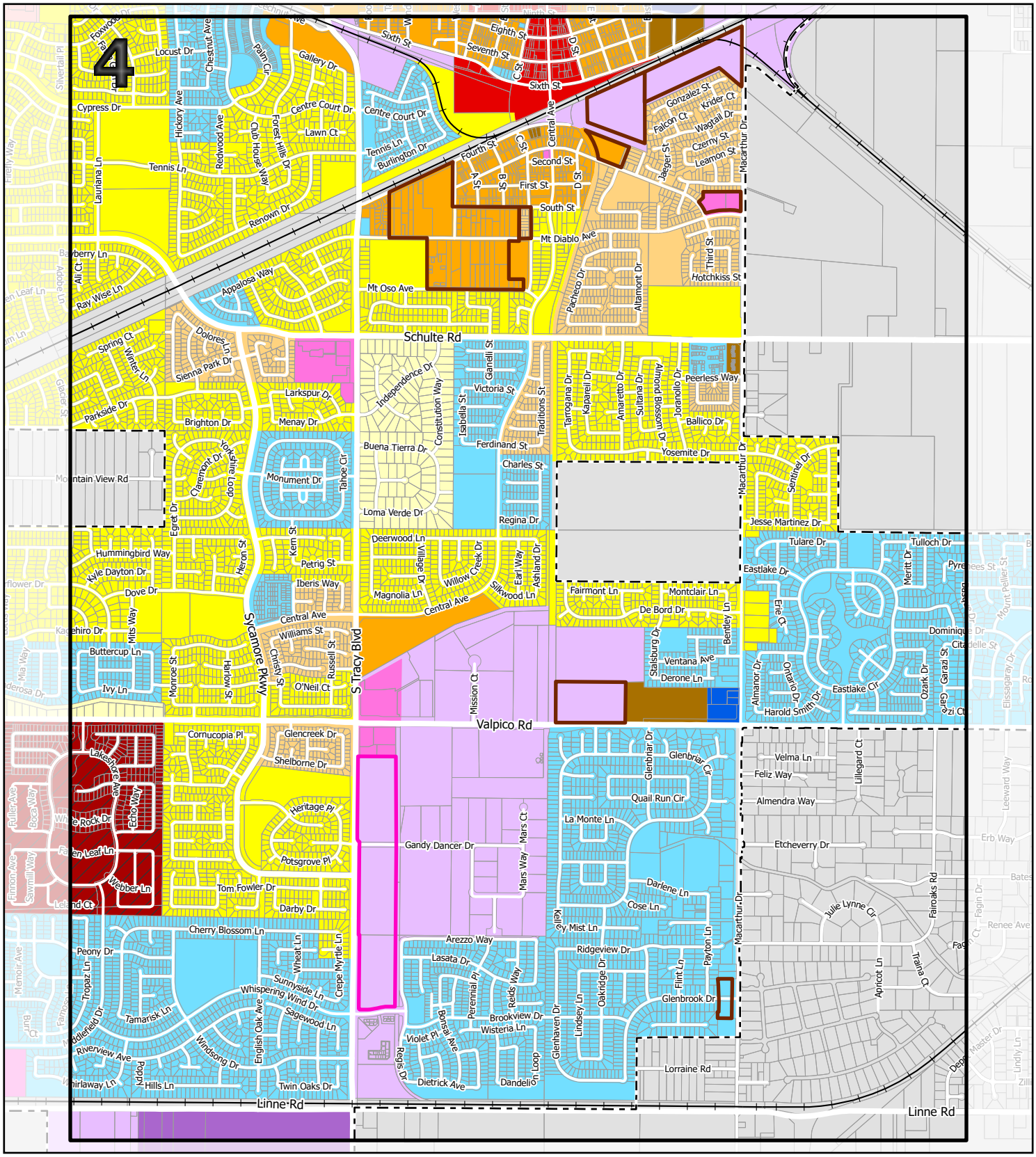
ES-3d.

Rezone Areas: Grid 3

Southwest Tracy/Canals

0 500 1,000 Feet

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Legend

- Tracy City Limits

Rezone Area

- To be rezoned HDR - High Density Residential
- To be rezoned MU1 - Mixed Use 1

Current Zoning Designation

- RE - Residential Estate
- LDR -Low Density Residential
- MDR - Medium Density Residential
- MDC - Medium Density Cluster
- HDR - High Density Residential
- PUD - Planned Unit Development
- M1 - Light Industrial
- M2 - Heavy Industrial
- NS - Neighborhood Shopping
- CS - Community Shopping Center
- CBD - Central Business District
- GHC - General Highway Commercial
- POM - Professional Office Medical
- TV - Tracy Village Specific Plan

ES-3e.

Rezone Areas: Grid 4

Central/South Tracy

0 500 1,000 Feet

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

1.1 PURPOSE AND INTENDED USES OF THE ENVIRONMENTAL IMPACT REPORT (EIR)

An EIR must disclose the expected environmental impacts, including impacts that cannot be avoided, growth-inducing effects, impacts found not to be significant, and significant cumulative impacts, as well as identify mitigation measures and alternatives to the proposed project that could reduce or avoid its significant adverse environmental impacts. CEQA requires government agencies to consider and, where feasible, minimize environmental impacts of proposed development.

The City of Tracy, as the lead agency, has prepared this Draft EIR for the Rezone Program and General Plan Amendment project (SCH # 2024060655) to provide the decisionmakers, the public and the responsible and trustee agencies with an objective analysis of the potential environmental impacts resulting from implementation of the proposed Project. The environmental review process enables interested parties to evaluate the proposed Project in terms of its environmental consequences, to examine and recommend methods to eliminate or reduce potentially significant adverse impacts, and to consider a reasonable range of alternatives to the proposed Project. This EIR is an informational document only and does not by itself approve or deny a project. The EIR will be used as the primary environmental document to evaluate full development, all associated infrastructure improvements, and permitting actions associated with the proposed Project. The decision to certify the EIR is based on compliance with the requirements specified in CEQA Guidelines Section 15090, as determined by the City of Tracy. The decision to approve or deny the Project is a separate action from certifying the EIR, and the EIR will be used by the City of Tracy to determine whether to approve, modify, or deny the proposed Project and associated approvals in light of the Project's environmental effects. All of the actions and components of the proposed Project are described in detail in Chapter 2.0, Project Description.

1.2 TYPE OF EIR

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This Draft EIR has been prepared as a Program EIR pursuant to CEQA Guidelines Section 15168. Section 15168 states:

> A Program EIR is an EIR that may be prepared on a series of actions that can be characterized as one large project and are related either:
>
> 1. Geographically,
> 2. As logical parts in the chain of contemplated actions,
> 3. In connection with issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program, or
> 4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

A program-level analysis considers the broad environmental effects of the Rezone Program and General Plan Amendment. This Draft EIR will be used to evaluate subsequent projects and activities to implement the Housing Element.

This Draft EIR is intended to provide the information and environmental analysis necessary to assist public agency decision-makers in considering approval of the rezoning of sites as prescribed in the project description.

Additional environmental review under CEQA may be required for subsequent projects and would be generally based on the subsequent project's consistency with the Housing Element, General Plan, and the analysis in this Draft EIR, as required under CEQA. It may also be determined that some future projects or infrastructure improvements may be exempt from environmental review. When individual subsequent projects or activities are proposed under the Rezone Program and General Plan Amendment, the lead agency that would approve and/or implement the individual project would examine the projects or activities to determine whether their effects were adequately analyzed in this Draft EIR (CEQA Guidelines Section 15168). If the projects or activities would have no effects beyond those disclosed in this Draft EIR, no further CEQA compliance would be required.

1.3 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

The term "Responsible Agency" includes all public agencies other than the Lead Agency that have discretionary approval power over the proposed Project or an aspect of the proposed Project (CEQA Guidelines Section 15381). For the purpose of CEQA, a "Trustee" agency has jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California (CEQA Guidelines Section 15386).

The following agencies are considered "Responsible Agencies" or "Trustee Agencies" for the proposed Project, and may be required to issue permits or approve certain aspects of the proposed Project:

- California Department of Fish and Wildlife (CDFW);
- California Department of Transportation (Caltrans) District 10;
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- San Joaquin Local Agency Formation Commission (LAFCo);
- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- U.S. Army Corps of Engineers (USACE); and/or
- United States Fish and Wildlife Service (USFWS).

1.4 ENVIRONMENTAL REVIEW PROCESS

The review and certification process for the EIR has involved, or will involve, the following general procedural steps:

NOTICE OF PREPARATION AND INITIAL STUDY

The City of Tracy circulated a Notice of Preparation (NOP) of an EIR for the proposed Project on June 14, 2024 to the State Clearinghouse, State Responsible Agencies, State Trustee Agencies, Other

Public Agencies, Organizations and Interested Persons. A public scoping meeting was held on July 10, 2024 to present the project description to the public and interested agencies, and to receive comments from the public and interested agencies regarding the scope of the environmental analysis to be included in the Draft EIR. The 30-day NOP public comment period concluded on July 15, 2024. Concerns raised in response to the NOP were considered during preparation of the Draft EIR. The NOP and comments received on the NOP by interested parties are presented in Appendix A.

DRAFT EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the proposed Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. This Draft EIR identifies issues determined to have no impact or a less than significant impact, and provides detailed analysis of potentially significant and significant impacts. Comments received in response to the NOP were considered in preparing the analysis in this EIR. Upon completion of the Draft EIR, the City of Tracy will file the Notice of Completion (NOC) with the State Clearinghouse of the Governor's Office of Planning and Research to begin the public review period. Additionally, the City of Tracy will file the Notice of Availability with the County Clerk and have it published in a newspaper of regional circulation to begin the local public review period.

PUBLIC NOTICE/PUBLIC REVIEW

The City of Tracy will provide a public notice of availability for the Draft EIR, and invite comment from the general public, agencies, organizations, and other interested parties. Consistent with CEQA, the review period for this Draft EIR is forty-five (45) days. Public comment on the Draft EIR will be accepted in written form. All comments or questions regarding the Draft EIR should be addressed to:

Craig Hoffman | Senior Planner
City of Tracy | 333 Civic Center Plaza | Tracy, CA 95376
Phone: 209-831-6426
Email: PlanningAdmin@cityoftracy.org

RESPONSE TO COMMENTS/FINAL EIR

Following the public review period of the Draft EIR, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments received at any public hearing that may be held during such review period.

CERTIFICATION OF THE EIR/PROJECT CONSIDERATION

The City of Tracy will review and consider the Final EIR. If the City of Tracy finds that the Final EIR is "adequate and complete," the City of Tracy will certify the Final EIR in accordance with CEQA. The rule of adequacy generally holds that an EIR can be certified if:

1. The EIR shows a good faith effort at full disclosure of environmental information; and
2. The EIR provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of environmental considerations.

Following review and consideration of the Final EIR, the City of Tracy may take action to approve, modify, or reject the proposed Project. A Mitigation Monitoring and Reporting Program, as described below, would also be adopted in accordance with Public Resources Code Section 21081.6(a) and CEQA Guidelines Section 15097 for mitigation measures that have been incorporated into or imposed upon the proposed Project to reduce or avoid significant effects on the environment. This Mitigation Monitoring and Reporting Program will be designed to ensure that these measures are carried out during project implementation, in a manner that is consistent with the EIR. Further, the City of Tracy must prepare a Findings of Fact to summarize the environmental effects of the proposed Project. If significant and unavoidable impacts are identified in the EIR, the City must also prepare a Statement of Overriding Considerations which provides rationale for overriding the significant environmental impacts in light of other identified benefits, such as social or economic reasons.

1.5 ORGANIZATION AND SCOPE

Sections 15122 through 15132 of the CEQA Guidelines identify the content requirements for Draft and Final EIRs. An EIR must include a description of the project and its environmental setting, an environmental impact analysis, mitigation measures, alternatives, significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. Discussion of the environmental issues addressed in the Draft EIR was established through review of environmental and planning documentation developed for the proposed Project, environmental and planning documentation prepared for recent projects located within the City of Tracy, applicable local and regional planning documents, and responses to the Notice of Preparation (NOP).

This Draft EIR is organized in the following manner:

EXECUTIVE SUMMARY

The Executive Summary summarizes the characteristics of the proposed Project, known areas of controversy and issues to be resolved, and provides a concise summary matrix of the proposed Project's environmental impacts and possible mitigation measures. The Executive Summary also identifies the alternatives that reduce or avoid at least one significant environmental effect of the proposed Project.

CHAPTER 1.0 – INTRODUCTION

Chapter 1.0 briefly describes the purpose of the environmental evaluation, identifies the lead, trustee, and responsible agencies, summarizes the process associated with preparation and certification of an EIR, and identifies the scope and organization of the Draft EIR.

CHAPTER 2.0 – PROJECT DESCRIPTION

Chapter 2.0 provides a detailed description of the proposed Project, including the location, intended objectives, background information, the physical and technical characteristics, including the decisions subject to CEQA, related improvements, and a list of related agency action requirements.

CHAPTER 3.0 – ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

Chapter 3.0 contains an analysis of environmental topic areas as identified below. Each subchapter addresses a topical area and is organized as follows:

Environmental Setting. A description of the existing environment as it pertains to the topical area.

Regulatory Setting. A description of the regulatory environment that may be applicable to the proposed Project.

Impacts and Mitigation Measures. Identification of the thresholds of significance by which impacts are determined, a description of project-related and cumulative impacts associated with the environmental topic, identification of appropriate mitigation measures, and a conclusion as to the significance of each impact.

The following environmental topics are addressed in this section:

- Air Quality
- Greenhouse Gases and Climate Change
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

As discussed in Chapter 6.0, Effects Found Not To Be Significant, impacts related to several other topics were scoped out as the proposed Project would not have a potentially significant effect on those resources.

CHAPTER 4.0 – ALTERNATIVES TO THE PROJECT

CEQA Guidelines Section 15126.6 requires that an EIR describe a range of reasonable alternatives to the proposed Project, which could feasibly attain the basic objectives of the proposed Project and avoid and/or lessen any significant environmental effects of the proposed Project. Chapter 4.0 provides a comparative analysis between the environmental impacts of the proposed Project and the selected alternatives.

CHAPTER 5.0 – OTHER CEQA-REQUIRED TOPICS

Chapter 5.0 evaluates and describes the following CEQA required topics: impacts considered less-than-significant, significant and irreversible impacts, growth-inducing effects, and significant and unavoidable environmental effects.

CHAPTER 6.0 – EFFECTS FOUND NOT TO BE SIGNIFICANT

This section presents information about the proposed Project's impact on specific environmental topic areas that were determined to have no impact. During this evaluation, certain impacts of the Project were found to have no impact or be less than significant due to the inability of the Project to create such impacts or the absence of Project characteristics producing effects of this type.

CHAPTER 7.0 – REPORT PREPARERS

This section lists all authors and agencies that assisted in the preparation of the EIR, by name, title, and company or agency affiliation.

APPENDICES

This section includes all notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis.

1.6 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

The City of Tracy received seven written comment letters on the NOP for the proposed Project from the agencies listed below.

- California Air Resources Board (CARB)
- Confederated Villages of Lisjan Nation
- Integral Communities and its various affiliates ("Tracy Hills")
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Native American Heritage Commission (NAHC)
- San Joaquin Council of Governments (SJCOG)
- San Joaquin County Environmental Health Department

Copies of those NOP comment letters are provided in Appendix A of this Draft EIR. The City also held a public scoping meeting on July 10, 2024. One oral comment from Robert Tanner was provided at that scoping meeting.

1.7 POTENTIAL AREAS OF CONCERN

Aspects of the proposed Project that could be of public concern include the following:

- Potential effects on known or previously undiscovered tribal cultural resources
- Impacts on air quality
- Land use compatibility, including increased residential density throughout the city
- Potential effects from existing hazardous materials, particularly in the Bow Tie area, on the proposed Project
- Provision of affordable housing
- Reducing greenhouse gas emissions and complying with the 2022 Scoping Plan for Achieving Carbon Neutrality through the reduction in vehicle miles traveled (VMT), transportation electrification, and building decarbonization
- Accurate reflection of existing land use plans and/or development agreements throughout the city such that the proposed Project can build on an accurate baseline scenario

The project analyzed in this Draft Environmental Impact Report (EIR) is implementation of the City of Tracy Rezone Program and General Plan Amendment project (proposed Project). The proposed Project is comprised of three key actions that can be summarized as:

- Rezone opportunity sites identified in the City's Housing Element to satisfy the City's Regional Housing Needs Allocation (RHNA) requirement plus a buffer for each of the income categories;
- Update the City's Zoning Code to allow for increased densities and establish a new zoning district to accommodate additional residential units; and
- Amend the City's General Plan, including updates to the Land Use, Safety, and Circulation Elements, and introduce a new General Plan Element for the topic of Environmental Justice in compliance with State law.

2.1 INTRODUCTION

State law requires the City to have and maintain a general plan with specific contents in order to provide a vision for the City's future and inform local decisions about land use and development, including issues such as circulation, conservation, and safety.

The City of Tracy General Plan is a comprehensive land use and development policy document that establishes a vision for the future and series of policies to achieve that vision over time. The General Plan contains goals, objectives, policies and actions categorized into ten Elements (chapters). The current General Plan was last amended and updated in 2011. The Housing Element (HE) is published separately from the main document.

The Tracy Housing Element for the 2023-2031 update cycle for jurisdictions in the San Joaquin Council of Governments (SJCOG) region was adopted in 2025 as an amendment to the Tracy General Plan. The Housing Element update is mandated by State law. The Housing Element establishes goals and policies, and identifies future actions to address the existing and projected housing needs of Tracy. The goals, policies, and actions are required by state law to plan for the regional housing targets allocated to Tracy by SJCOG and the Department of Housing and Community Development for the period of 2023 to 2031 and to affirmatively further fair housing.

The Housing Element identifies how the City would accommodate development of 8,830 total housing units that were included in the City's Regional Housing Needs Allocation (RHNA) for 2023-2031, as shown in **Table 2-1**. In addition, the City has yet to complete the rezoning of 31.7 acres to meet the shortfall for the 5th Cycle Housing Element RHNA. The 31.7 acres consists of four parcels to be rezoned from Light Industrial to High Density Residential (HDR). This means that there is a carryover of 500 lower-income units from the previous cycle. With the 500 unit carryover lower-income units from the 5th Cycle, the City has a RHNA obligation of 9,330 units (5,373 lower-income). Under existing zoning, the City has realistic capacity for 1,126 lower income units and 655 moderate

income units, creating a lower income shortfall of 3,747 units and a moderate-income shortfall of 520 units.[1]

TABLE 2-1: TRACY REGIONAL HOUSING NEEDS ALLOCATION (RHNA)

	UNITS BY INCOME GROUP[A]				TOTAL UNITS
	VERY LOW (0-50% AMI)	LOW (51-80% AMI)	MODERATE (81-120% AMI)	ABOVE MODERATE (>120% AMI)	
RHNA Allocation	2,994	1,879	1,175	2,782	8,830
% of Total	34%	21%	13%	32%	100%[b]

NOTES:

a. Units are grouped into categories based on the incomes of households accommodated and their relationship (percentage of) Area Median Income (AMI).

b. Percentages rounded to equal 100%.

SOURCE: SJCOG REGIONAL HOUSING NEEDS PLAN (RHNP), SEPTEMBER 22, 2022.

However, the City's adoption of the Housing Element did not implement specific changes to existing land use controls (e.g., zoning) or approve any physical development (e.g., construction of housing or infrastructure) that may be necessary to accommodate such development. As such, the adoption of the Housing Element did not result in any direct physical changes to the environment. The proposed Rezone Program and General Plan Amendment project now seeks to implement policies in the Housing Element and make physical changes to the City such that additional dwelling units can be constructed and the City can meet its RHNA requirement.

2.2 PROJECT LOCATION AND SETTING

The City of Tracy is located in San Joaquin County east of the Coastal Range that separates California's Central Valley from the San Francisco Bay Area. The City lies 68 miles south of Sacramento and 60 miles east of San Francisco. Tracy is situated within a triangle created by the intersection of several Interstate highways including I-205, I-580, and I-5, as shown on **Figure 2-1** and **Figure 2-2**. The City's strategic location along major interstate highways, access to railroads, and proximity to major markets like the Bay Area have fostered tremendous job growth and has become a bedroom community for the Bay Area.

The City is surrounded primarily by agricultural land to the north, south, and east. The community of Mountain House lies to the northwest. Agricultural and industrial land are to the west of the city. The Carnegie State Vehicular Recreation Area (SVRA) is southwest of the City.

The General Plan assesses two delineated areas known as the Sphere of Influence (SOI) and the Planning Area. A description of each in described below:

- **City Limits:** The city limits include the area within a City's corporate boundary, over which the City exercises land use authority and provides public services.
- **Sphere of Influence:** A Sphere of Influence (SOI) is the probable physical boundary and service area of a local agency, as adopted by a Local Agency Formation Commission (LAFCO).

[1] City of Tracy, 2022. 2023-2031 Housing Element. Submitted to HCD November 22. P. V-7.

- **Planning Area:** The planning area is defined as all lands within the City Limits and SOI.

2.3 PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires the description of the project in an EIR to state the objectives sought by the project.

"A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project."

In keeping with this requirement, the City's project objectives are as follows:

- Meet the requirements of State Housing Law by implementing zoning and land use changes, as called for in the City's 6th Cycle Housing Element.
- Update the City of Tracy General Plan Safety Element to address State requirements related to hazards, including flooding, fire, and emergency preparedness.
- Amend the Tracy General Plan to include a new Environmental Justice Element, consistent with the requirements of SB 1000.

2.4 PROJECT DESCRIPTION

In order to accommodate the City's RHNA units plus a buffer for each of the income categories, the proposed Project would result in three distinct actions:

- Rezone opportunity sites identified in the Housing Element City's to satisfy the City's Regional Housing Needs Allocation (RHNA) requirement plus a buffer for each of the income categories;
- Update the City's Zoning Code to allow for increased densities and establish a new zoning district to accommodate additional residential units; and
- Amend the City's General Plan, including updates to the Land Use, Safety, and Circulation Elements, and introduce a new General Plan Element for the topic of Environmental Justice in compliance with State law.

OPPORTUNITY SITES REZONES

The Tracy Housing Element identified a targeted rezoning program to meet the identified unit shortfall for the 6th Cycle Housing Element RHNA. The rezones identified in the Housing Element total approximately 239 acres and would accommodate 6,588 units, as summarized in **Table 2-2**.

The City identified specific parcels throughout the city that are vacant, underutilized, or being projected to build out as a residential. The rezoning of these parcels will provide increased housing capacity in prime areas with excellent access to employment centers and educational facilities, as shown in **Table 2-3** and shown on **Figures 2-3a-e**.

TABLE 2-2: SUMMARY OF OPPORTUNITY SITES FOR REZONING

EXISTING ZONE	*ACRES*	*VERY LOW UNITS*	*LOW UNITS*	*MODERATE UNITS*	*TOTAL UNITS*
LDR	3.8			113	113
MDC	5.5	98	64		162
MDR	40.3	700	469		1,169
PUD	75.4	1,029	641	575	2,245
NS	3.2	59	37		96
I-205 – GC	7.9	146	91		237
I-205 – CC	19.6	357	227		584
M1	21.9	129	129	394	652
M1-TH	5.0	91	57		148
MDR-TH	15.0	276	171		447
GHC	1.1	17	12		29
M1 (to be rezoned to new MU-1)	40.3	141	141	424	706
Total	**239**	**3,043**	**2,039**	**1,506**	**6,588**

SOURCE: CITY OF TRACY, 2023-2031 HOUSING ELEMENT, TABLES IV-17 AND IV-18, ADOPTED MAY 2025. DE NOVO PLANNING GROUP, 2025.

ZONING CODE UPDATES

The proposed Project would also include Zoning Code revisions to support housing goals including the following specific updates:

- Accommodate HE Program 9: Provision of Adequate Sites.

  The following zones are proposed for increased densities:

  - Medium Density Residential (MDR) – from 5.9-12 du/ac to 5.9-20 du/ac
  - Medium Density Cluster (MDC) – from 5.9-12 du/ac to 5.9-20 du/ac
  - High Density Residential (HDR) – from 12-25 du/ac to 20-35 du/ac
  - General Highway Commercial (GHC) – from 12-25 du/ac to 20-35 du/ac
  - Establish a new Zoning District (MU-1) at 20-35 du/acre

- Accommodate HE Program 14: Zoning Ordinance Updates. The City will amend the Zoning Code to address the following to facilitate the development of a variety of housing types:

  - **Density Bonus:** The City's Density Bonus must be updated to reflect recent changes to State law, such as AB 1763, which made several changes to density bonus requirements for 100 percent affordable projects, and AB 2345, that further incentivizes the production of affordable housing.
  - **Residential Care Facilities:** In accordance with the Lanterman Act, amend the Zoning Ordinance to permit residential care facilities serving six or fewer persons as a single-family residential use and permitted by right in all residential zones. In addition, consistent with City practice, amend the Zoning Ordinance to allow residential care facilities of seven or more persons in all residential zones with a Conditional Use Permit. Objective conditions for approval will be established to ensure certainty in outcomes.
  - **Farmworker Housing:** The California Employee Housing Act further defines housing for agricultural workers consisting of 36 beds or 12 units be treated as an agricultural use

and permitted where agricultural uses are permitted. The City of Tracy permits crop and tree farming in the A, LDR, MDC, MDR, and HDR zones. The City will amend the Zoning Ordinance to address the provision of farmworker housing consistent with the Employee Housing Act.

- **Employee Housing:** The California Employee Housing Act requires that housing for six or fewer employees be treated as a regular residential use. The City will amend the Zoning Ordinance to address the provision of farmworker housing consistent with the Employee Housing Act.
- **Low Barrier Navigation Center:** While the City is working on the Low Barrier Navigation Center on Arbor Avenue, the Zoning Ordinance does not address this type of facility. AB 101 requires cities to allow a Low Barrier Navigation Center development by right in areas zoned for mixed uses and nonresidential zones permitting multifamily uses if it meets specified requirements. The City will amend the Zoning Ordinance to be in compliance with AB 101.
- **Emergency Shelter Parking Standards:** The Zoning Ordinance does not specify any parking requirements for emergency shelters. AB 139 specifies that local governments may impose a parking requirement, but that it shall only be an amount adequate for parking for shelter staff may not exceed the requirements for residential and nonresidential uses in the same zone. The City will amend the Zoning Ordinance to be in compliance with AB 139.
- **Transitional and Supportive Housing:** State law (AB 2634 and SB 2) requires local jurisdictions to allow for transitional and supportive housing subject to the same standards as similar residential uses within the same zone. AB 2162 requires that supportive housing that meets specific criteria to be permitted by right in zones where multi-family and mixed-use developments are permitted. Specific criteria include the size of the project and percentage set aside for target population, and specified amount of floor area for supportive services, among others. For projects located within 0.5 mile from transit, no minimum parking requirements may be applied. The City will amend the Zoning Ordinance to be in compliance with these State laws.
- **Parking Standards:** Amend the City's parking ordinance to reduce the number of off-street parking spaces required for new multi-family housing development projects.
- **Definition of Family:** The City's current definition of "family" is "one or more persons occupying a single dwelling unit, under no more than one written or oral rental agreement." This definition may act as a constraint on housing for persons with disabilities. The City will revisit this definition of "family" to ensure that it poses no negative impacts for persons with disabilities.
- **SB 35 and SB 330 Processing:** In compliance with State law, the City will establish written procedures for processing SB 35 and SB 330 development applications.
- **ADU Requirements:** Update the Zoning Code to comply with State requirements for ADUs.

GENERAL PLAN AMENDMENT

The City would undertake several necessary amendments to the General Plan, including updates to the Land Use, Safety, and Circulation Elements. In addition, the City will be including a new General Plan Element for the topic of Environmental Justice consistent with State planning law.

Each of these updates is briefly described below:

Land Use Element: The Land Use Element and Land Use Map will be updated for consistency with Housing Element site rezones to included appropriate and complementary land uses that support housing goals.

Circulation Element: The Circulation Element will be updated to be consistent with vehicle miles travelled (VMT) standards and thresholds for project level review. This update is intended to bring the element in line with statewide guidance related to assessing impacts relative to VMT as required under SB 743. The main component of the Circulation Element update will include incorporation of a citywide VMT tool to be used to assess and reduce impacts from future development projects within Tracy.

Safety Element: The City is preparing a targeted update to the General Plan Safety Element in coordination with the Housing Element and other identified updates. State of California legislation requires that the City's Safety Element be reviewed and updated as necessary alongside the City's Housing Element update. Proposed updates to the Safety Element include amending goals, policies, and objectives; integrating updated background information and mapping; and incorporating programs from other citywide planning documents. This targeted update will address policies related to flood, fire, emergency evacuation and preparation and climate resiliency and adaptation.

Environmental Justice Element. The update of two or more General Plan Elements triggers a State requirement to address environmental justice under the provisions of Senate Bill (SB) 1000. Therefore, the City is required to include environmental justice policies to ensure compliance with State law. This Element will identify goals and policies to reduce the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity. This Element will also identify policies to promote civic engagement, and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

DEVELOPMENT AND BUILDOUT

The EIR will address buildout of the General Plan Land Use Map inclusive of the proposed Project's rezone program through 2045. Buildout under the proposed Project includes several components of growth. For the purposes of the analysis in this EIR, projected new growth in Tracy stems from the following growth factors:

Sites Rezones: The Tracy Housing Element has identified a targeted rezoning program to meet the identified unit shortfall for the 6th Cycle Housing Element RHNA. The rezones identified in the Housing Element total approximately 239 acres and would accommodate 6,588 units.

Rezone sites are summarized in Table 2-2. The Inventory of rezone sites is shown in Figures 2-3a-e.

Updated Zoning Code: Targeted Density Increases in the Housing Element Update have been identified to accommodate the RHNA shortfall through increasing the permitted densities of existing multi-family zones, and the development of a new mixed use zoning district. The following Zoning Code amendments are proposed that would increase densities:

- MDR – from 5.9-12 du/ac to 5.9-20 du/ac
- MDC – from 5.9-12 du/ac to 5.9-20 du/ac
- HDR – from 12-25 du/ac to 20-35 du/ac
- GHC – from 12-25 du/ac to 20-35 du/ac
- Establish a new Zoning District (MU-1) at 20-35 du/acre

Other Citywide Buildout: Continued growth would occur through buildout of the existing General Land Use Map. The City would continue to develop housing, job generating uses, and community facilities throughout the life of the General Plan, typically on vacant and underutilized parcels, consistent with the existing General Plan Land Use Map designations. For planning purposes, a 20-year time horizon is assumed under this EIR's analysis and 2045 is assumed to be the future buildout year.

As shown in **Table 2-3**, buildout of the General Plan could yield a total of up to 51,008 housing units, a population of 149,298 people, and 90,916 jobs within the Planning Area by 2045. This represents development growth over existing conditions of up to 21,355 new dwelling units, and 50,995 new jobs.

TABLE 2-3. DEVELOPMENT CAPACITY

	POPULATION	*HOUSING UNITS*	*JOBS*	*JOBS HOUSING RATIO*
2024 Baseline (Existing Conditions)	96,076	29,653	39,921	1.35
Projected 2045 Total Buildout*	149,298	51,008	90,916	1.78
Total New Growth Over Existing Conditions 2024-2045	+53,223	+21,355	+50,995	

*NOTES: *TOTAL BUILDOUT INCLUDES DEVELOPMENT ON VACANT AND UNDERUTILIZED PARCELS WITHIN TRACY THAT ARE NOT OTHERWISE IMPACTED OR RELATED TO THE PROPOSED REZONE PROGRAM IN ADDITION TO THE DEVELOPMENT ACCOMMODATED UNDER THE PROPOSED REZONE PROGRAM.*

SOURCES: DE NOVO PLANNING GROUP, 2024, 2023 SAN JOAQUIN COUNTY ASSESSOR DATA FILE, TRACY HOUSING ELEMENT INVENTORY SHAPEFILES, TRACY TRAVEL DEMAND MODEL (KIMLEY-HORN).

Growth projections should not be considered a prediction for growth, as the actual amount of development that will occur throughout the planning horizon of the General Plan is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, land turnover, and other factors. Additionally, new development and growth are largely dictated by existing development conditions. Very few communities in California actually develop to the full potential allowed in their respective General Plans during the planning horizon.

2.5 REQUIRED APPROVALS

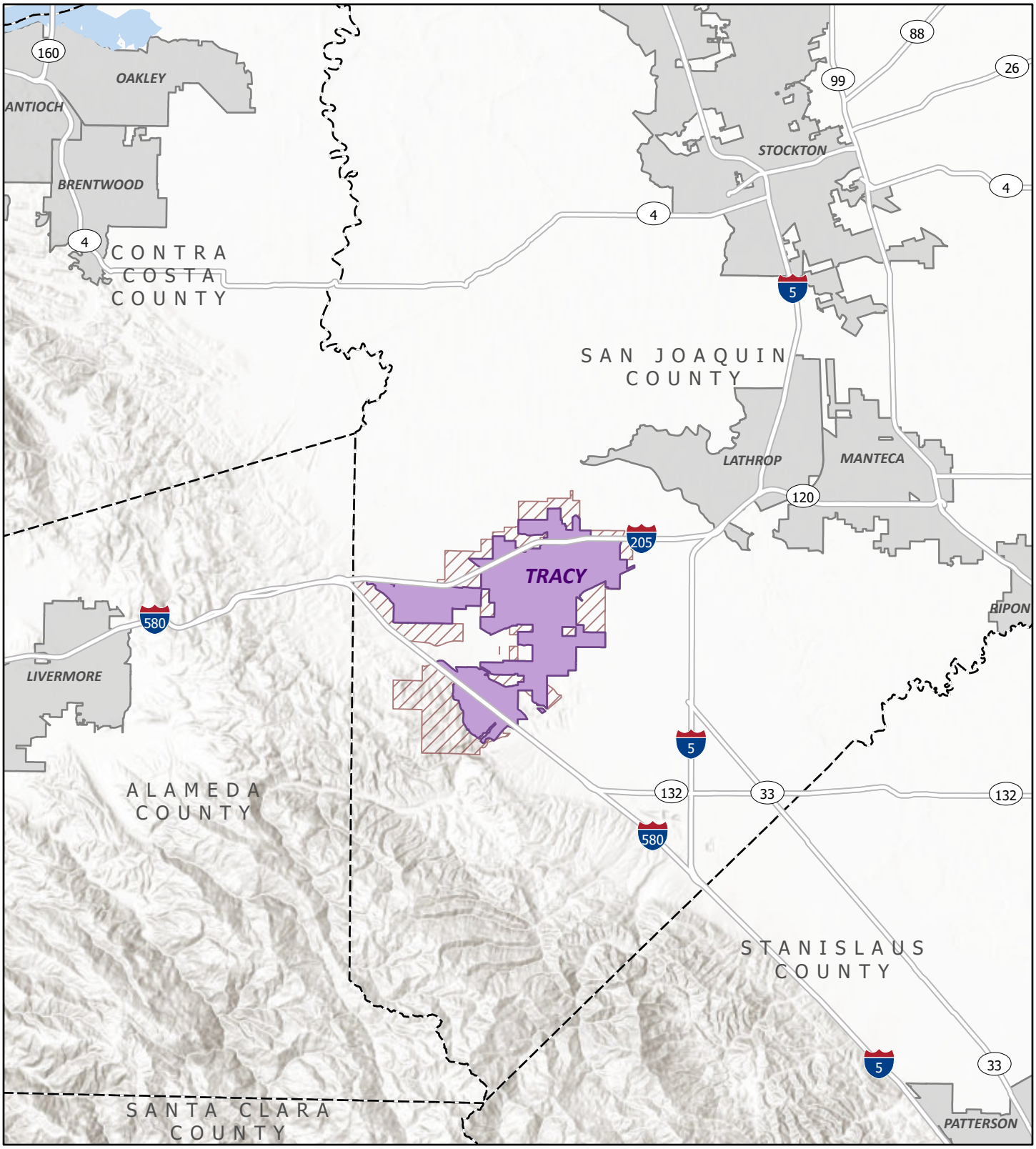
Actions to be taken by the City to adopt and implement the proposed Project include, but are not limited to:

- Adoption of General Plan amendments to re-designate the land uses for rezone sites, and to update General Plan Elements for compliance with state laws and internal consistency,
- Rezoning of sites, identified in the Tracy Housing Element, and
- Adoption of Zoning Ordinance amendments to accommodate the rezone sites and development standards identified by the Tracy Housing Element.

These proposed actions would require review and recommendation by the Planning Commission, followed by consideration and action by the City Council.

As the Lead Agency and as appropriate under CEQA, the City also intends the EIR to serve as the CEQA-required environmental documentation for consideration of the Project by other Responsible Agencies and Trustee Agencies which may have discretionary approval authority over the Project. Under the CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR (CEQA Guidelines Section 15381); and the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California (CEQA Guidelines Section 15386). While no Responsible Agencies and Trustee Agencies have been identified with approval actions associated with adoption of the Project, agencies may use the EIR when considering actions necessary for development on the identified sites. These agencies may include:

- California Department of Fish and Wildlife (CDFW);
- California Department of Transportation (Caltrans) District 10;
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- San Joaquin Local Agency Formation Commission (LAFCo);
- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- U.S. Army Corps of Engineers (USACE); and/or
- United States Fish and Wildlife Service (USFWS).



Legend

- City of Tracy
- Other Incorporated Area
- County Boundary
- Tracy Sphere of Influence

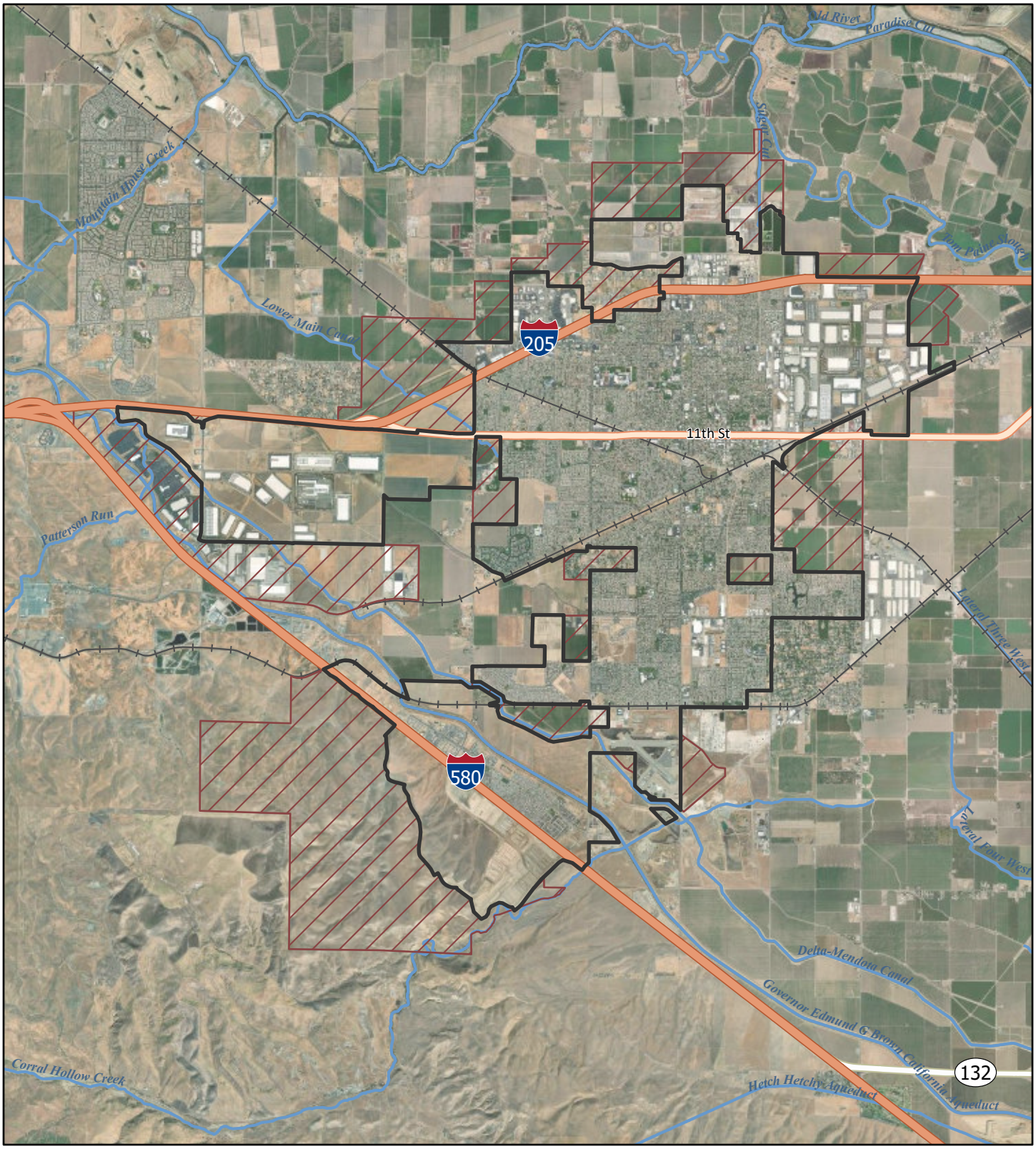
Figure 2-1.

Regional Location

0 2½ 5
Miles

Sources: California State Geoportal; ArcGIS Online World Hillshade Map Service. Map date: September 4, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm



Legend

- Tracy City Limits
- Tracy Sphere of Influence
- Railroad
- Rivers, Creeks, and Canals

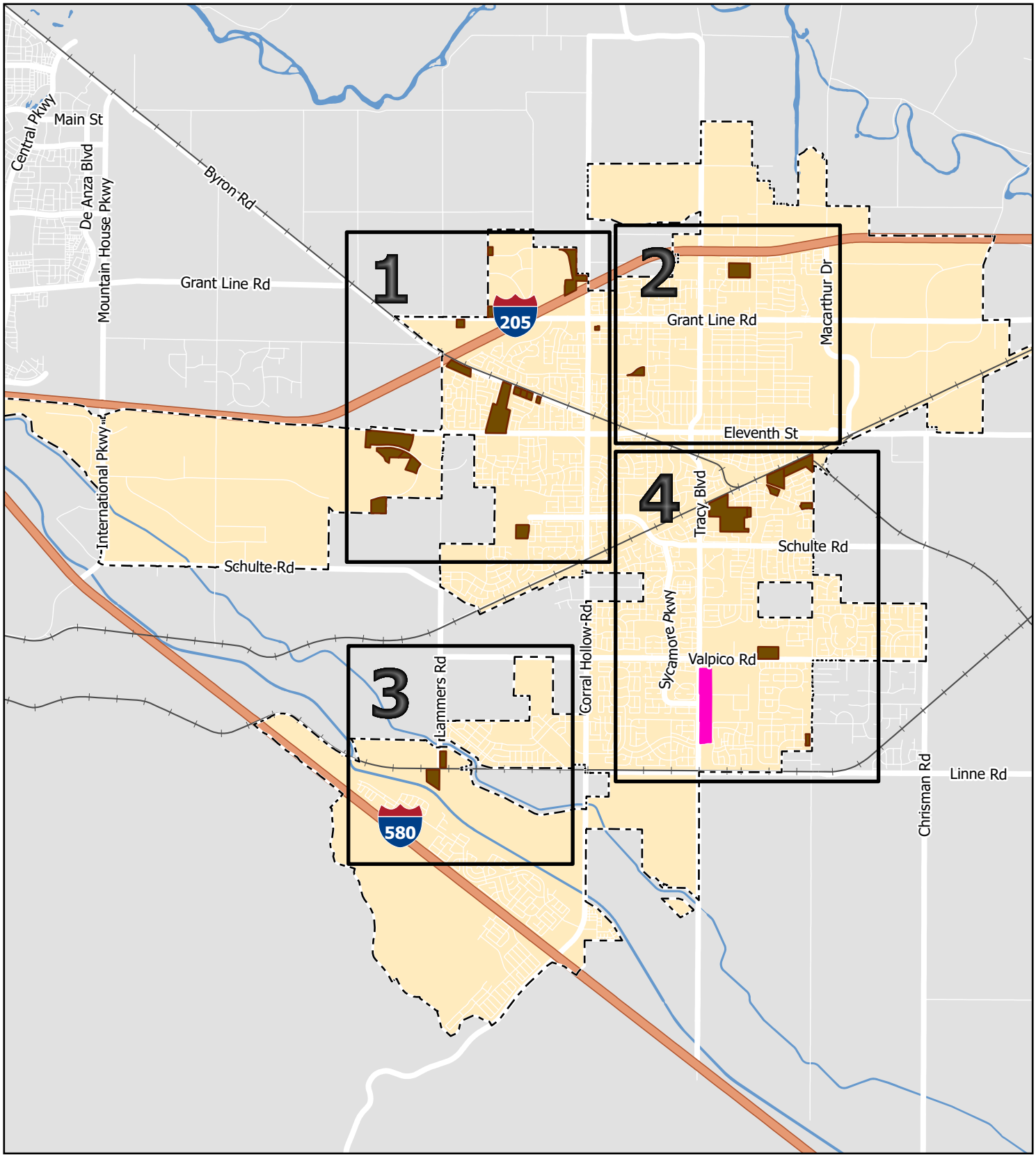
Figure 2-2.

Project Location

0 ½ 1
Miles

Sources: San Joaquin County GIS; USGS Transportation and Hydrography Datasets; MAXAR Imagery 8/7/2023 . Map date: September 4, 2024.

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City of Tracy

Rezone Area

To be rezoned HDR - High Density Residential

To be rezoned MU1 - Mixed Use 1

Grid Map Extents*

* *See individual Grid Maps 1-4 for Rezone Area detail*

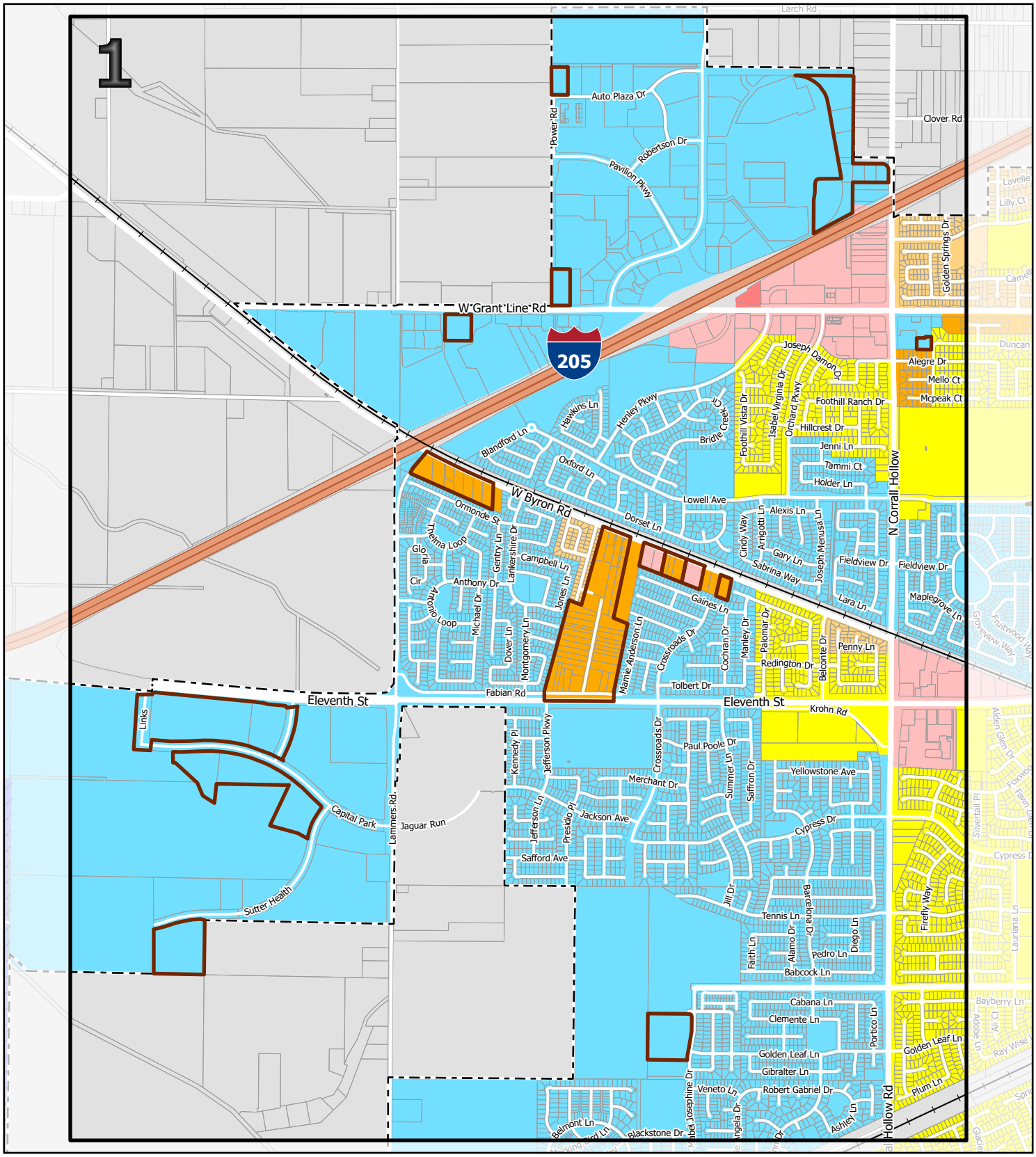
Figure 2-3a.

Rezone Areas Index Map

0 ½ 1 Miles

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12-8-2025



Legend

- Tracy City Limits

Rezone Area

- To be rezoned HDR - High Density Residential

Current Zoning Designation

- LDR -Low Density Residential
- MDR - Medium Density Residential
- MDC - Medium Density Cluster
- PUD - Planned Unit Development
- HS - Highway Service
- GHC - General Highway Commercial
- CRSP - Cordes Ranch Specific Plan

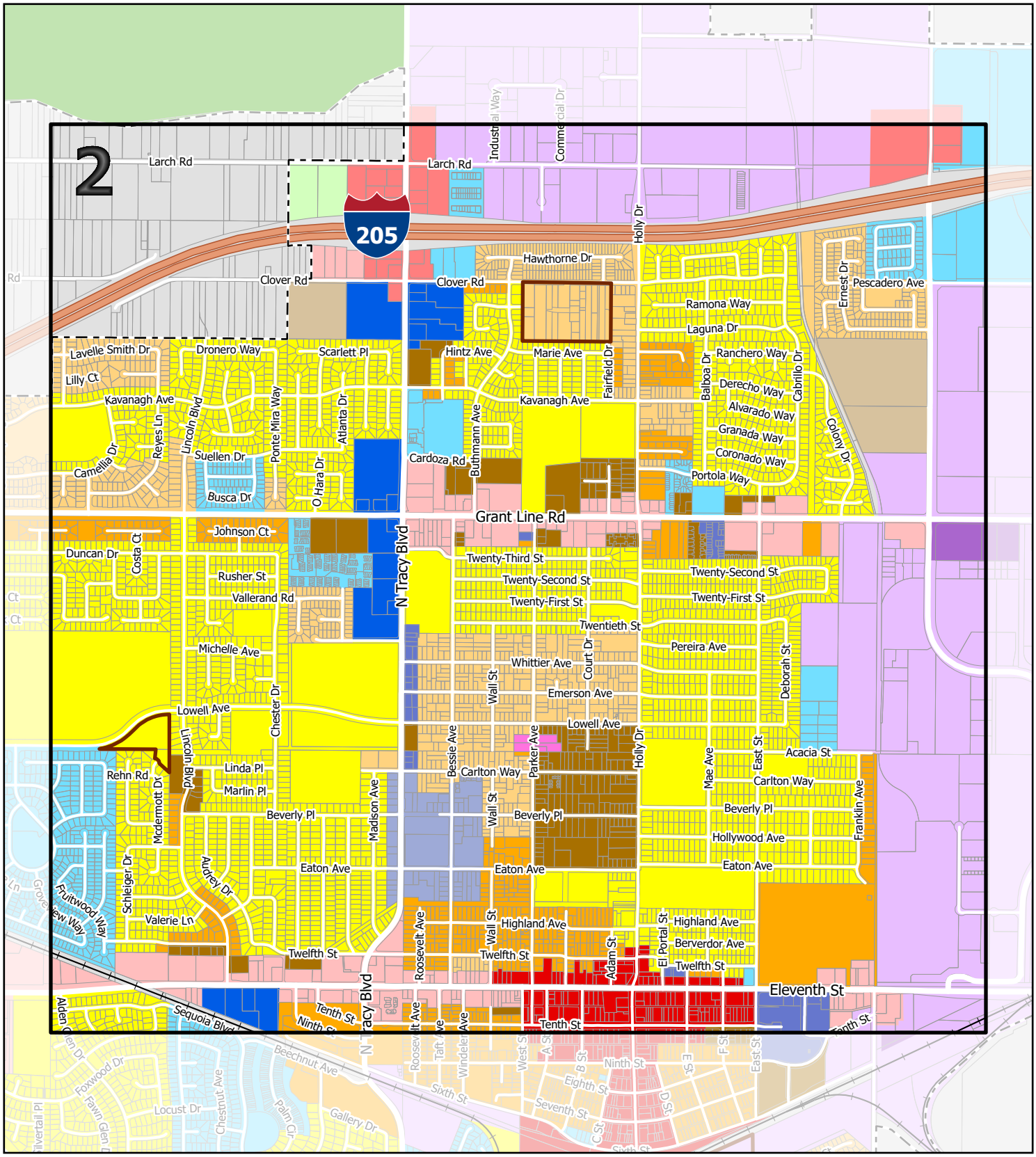
Figure 2-3b.

Rezone Areas: Grid 1

Northwest Tracy

0 500 1,000 Feet

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Legend

- Tracy City Limits

Rezone Area

- To be rezoned HDR - High Density Residential

Current Zoning Designation

- LDR -Low Density Residential
- MDR - Medium Density Residential
- MDC - Medium Density Cluster
- HDR - High Density Residential
- RMH - Residential Mobile Home
- PUD - Planned Unit Development
- M1 - Light Industrial
- M2 - Heavy Industrial
- NS - Neighborhood Shopping
- CS - Community Shopping Center
- CBD - Central Business District
- HS - Highway Service
- GHC - General Highway Commercial
- MO - Medical Office
- POM - Professional Office Medical
- CRS - Community Recreation Support Services
- P - Park
- NEI - Northeast Industrial Areas Specific Plan

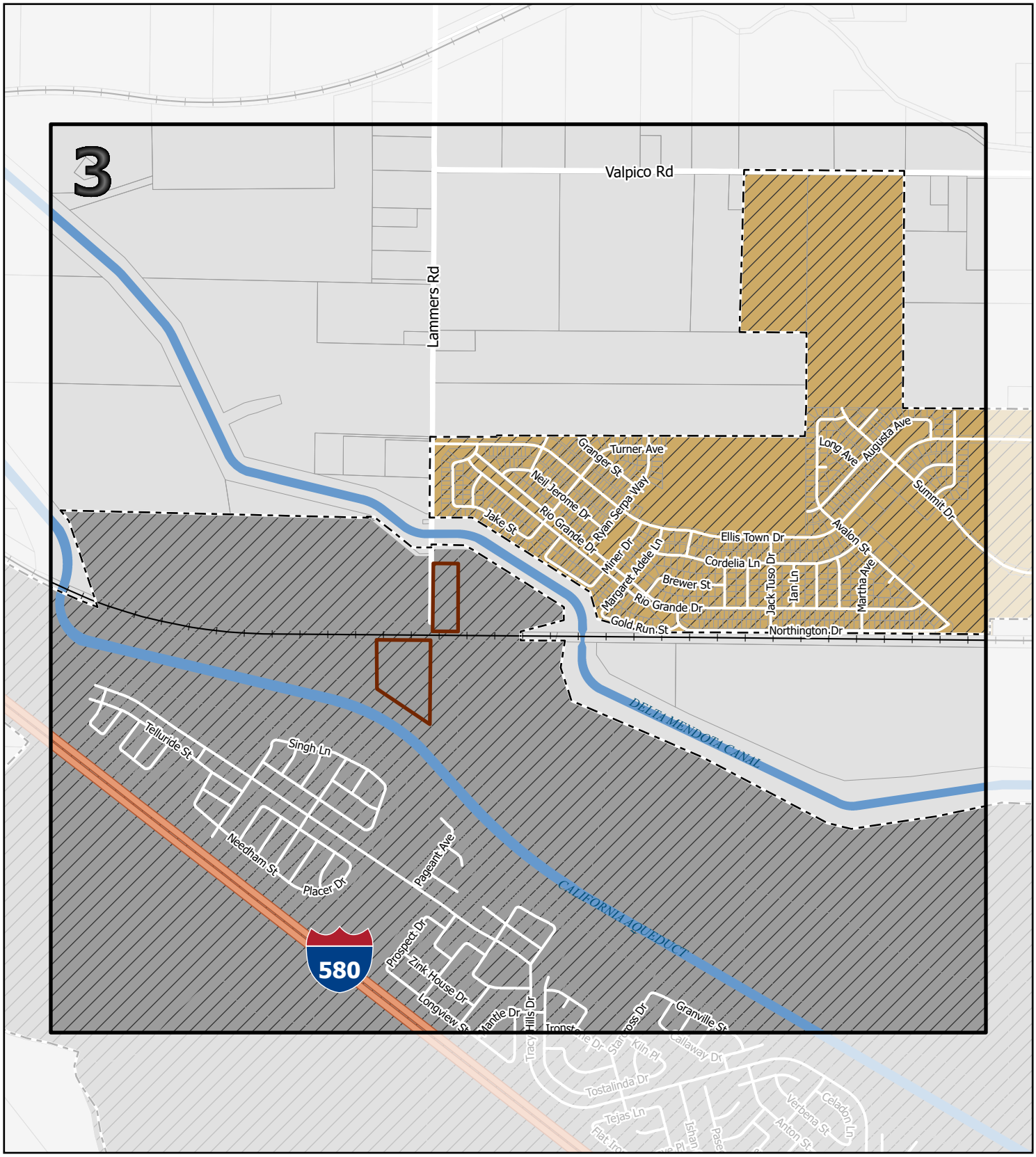
Figure 2-3c.

Rezone Areas: Grid 2

North/Central Tracy

0 500 1,000 Feet

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Legend

Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

E -Ellis Park Specific Plan

THSP - Tracy Hills Specific Plan

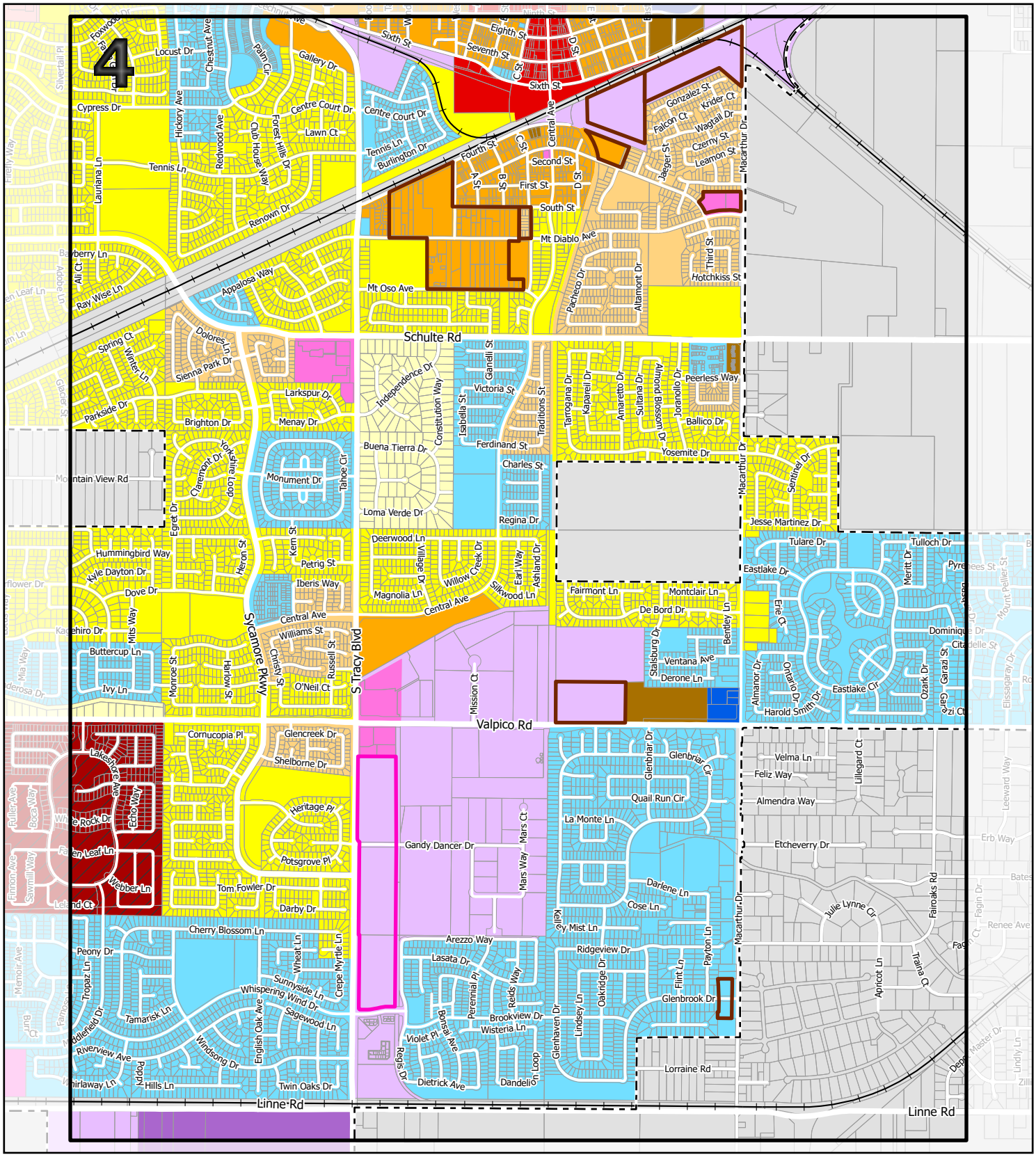
Figure 2-3d.

Rezone Areas: Grid 3

Southwest Tracy/Canals

0 500 1,000 Feet

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Legend

Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

To be rezoned MU1 - Mixed Use 1

Current Zoning Designation

RE - Residential Estate

LDR -Low Density Residential

MDR - Medium Density Residential

MDC - Medium Density Cluster

HDR - High Density Residential

PUD - Planned Unit Development

M1 - Light Industrial

M2 - Heavy Industrial

NS - Neighborhood Shopping

CS - Community Shopping Center

CBD - Central Business District

GHC - General Highway Commercial

POM - Professional Office Medical

TV - Tracy Village Specific Plan

Figure 2-3e.

Rezone Areas: Grid 4

Central/South Tracy

0 500 1,000 Feet

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3.0.1 INTRODUCTION TO THE ANALYSIS

This draft environmental impact report (EIR) evaluates and documents the physical environmental effects that could result from implementing the proposed The Campus project in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 *et seq.)* and the CEQA Guidelines (California Code of Regulations Title 14, Section 15000 *et seq*.). Sections 3.1 through 3.6 of this EIR consider the regulatory background, existing conditions, and environmental impacts associated with implementation of the proposed Project, as well as mitigation measures to reduce the impact of Project-specific and cumulative environmental impacts and level of significance of impacts following mitigation. This EIR discusses the physical environmental effects that could result from implementation of the proposed Project. Because certain environmental effects that are typically analyzed under CEQA would not occur under the proposed Project, these topics are not analyzed further in Sections 3.1 through 3.6 of this EIR, and are instead discussed in Chapter 6, Effects Found Not to be Significant, and Appendix B, Initial Study Checklist.

3.0.2 DEFINITIONS OF TERMS USED IN THE EIR

This EIR uses a number of terms that have specific meaning under CEQA. Among the most important of the terms used in the EIR are those that refer to the significance of environmental impacts. The following terms are used to describe the environmental effects of the proposed Project:

- **Significance Criteria:** The criteria used by the City of Tracy, as lead agency under CEQA, to determine whether the magnitude of an adverse, physical environmental impact would be significant. In determining the level of significance, the analysis recognizes that the proposed Project must comply with relevant federal, state, regional, and/or local regulations and ordinances that are regularly enforced through building codes and standards and/or other means.
- **Significant Impact:** The impact conclusion reached if the Project would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of Project-related physical change compared to specified significance criteria. A significant impact 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 or aesthetic significance."[1]
- **Less-than-Significant Impact:** The impact conclusion reached when the adverse physical environmental effect caused by the Project would not exceed the applicable significance criterion.
- **Significant and Unavoidable Impact:** The impact conclusion reached when the Project would result in a substantial adverse physical change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level, that is, to a magnitude below the applicable significance criterion.

[1] CEQA Guidelines, Section 15382.

- **Cumulative Impact:** Under CEQA, "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."[2] Like any other significant impact, a significant cumulative impact is one in which the cumulative adverse physical environmental effect would exceed the applicable significance criterion and the project's contribution is "cumulatively considerable."[3] If the contribution of a project to a significant cumulative impact is less than considerable, the cumulative impact would be less than significant.
- **Mitigation Measure:** A feasible action that could be taken that would avoid or reduce the magnitude of a significant impact. Section 15370 of the CEQA Guidelines defines mitigation as:

  (a)Avoiding the impact altogether by not taking a certain action or parts of an action;

  (b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation;

  (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

  (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and

  (e) Compensating for the impact by replacing or providing substitute resources or environments.

- **Feasible:** Under CEQA, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."[4]

3.0.3 SECTION FORMAT

Chapter 3 is divided into technical sections (e.g., Section 3.1, Air Quality) that present, for each environmental resource issue area, the physical environmental setting, regulatory setting, significance criteria, methodology and assumptions, and impacts on the environment. Where required, potentially feasible mitigation measures are identified to lessen or avoid significant impacts. Each section includes an analysis of project-specific and cumulative impacts for each issue area.

INTRODUCTION

Each technical environmental section begins with an introduction that briefly discusses the issues addressed in the section, identifies issues that may have been raised in Notice of Preparation scoping comments, and identifies major information sources.

[2] CEQA Guidelines, Section 15355.
[3] CEQA Guidelines, Section 15130(a).
[4] CEQA Guidelines, Section 15364.

ENVIRONMENTAL AND REGULATORY SETTING

Each section provides a description of the proposed Project's environmental setting and the regulatory setting as it pertains to relevant environmental resource issues. The environmental setting provides a point of reference for assessing the environmental impacts of the proposed Project and alternatives. The environmental setting describes the conditions that exist before implementation of the project. This setting establishes the baseline against which the proposed Project and alternatives are compared to assess the significance of environmental impacts.

The regulatory setting presents relevant information about federal, state, regional, and/or local laws, regulations, plans and/or policies that pertain to the environmental resources addressed in each section.

SIGNIFICANCE CRITERIA

Each section presents significance criteria against which the adverse physical environmental effects of the proposed Project are compared to determine the significance of impacts. The significance criteria used for the proposed Project were derived from Appendix G of the CEQA Guidelines and, where applicable, thresholds established by trustee and responsible agencies.

METHODOLOGY AND ASSUMPTIONS

Each section describes the analytical methods and key assumptions used to evaluate the effects of the proposed Project.

IMPACTS AND MITIGATION MEASURES

The methodology description is followed by a presentation of the adverse physical environmental impacts of the proposed Project, and, if impacts would be significant or potentially significant, potentially feasible mitigation measures that, if implemented, could avoid or reduce the magnitude of the significant impact. As required by CEQA Guidelines Section 15126.2(a), direct, indirect, short-term, long-term, on-site, and/or off-site impacts are analyzed, as appropriate, for each environmental impact.

Where enforcement of applicable laws, regulations, and standards exists and compliance can be reasonably anticipated, this EIR assumes that the proposed Project would meet the requirements of applicable laws and other regulations. The impact and mitigation discussions in each section are organized based on impact statements, prefaced by a number in boldfaced type. An explanation of each impact is followed by an analysis of and conclusion regarding its significance, based on the stated significance criterion. The analysis of environmental impacts considers the impacts that could be caused during both construction and operation of the proposed Project.

Where the impact for the proposed Project would be significant, it is followed by a presentation of potentially feasible mitigation measures. While this EIR includes information about potentially feasible mitigation measures, the Tracy City Council would make the final determination of feasibility of such measures.

The magnitude of reduction of an impact and the potential effect of that reduction in magnitude on the significance of the impact is presented. Each impact discussion concludes with a statement that the impact, following implementation of the mitigation measure(s) and/or the continuation of existing policies and regulations, either would be reduced to a less-than-significant level or would remain significant and unavoidable.

An example of the format is shown below.

Impact 3.X-1: Impact statement.

A discussion of the potential impact of the proposed Project on the resource is introduced in paragraph form. To identify impacts that may be site- or project element-specific, where appropriate, the discussion differentiates between construction-related effects and operational effects. A statement of the level of significance before application of any mitigation measures is provided in **bold**.

MITIGATION MEASURE(S)

If all impacts for the proposed Project are determined to be less than significant, the text here states, "None required."

If one or more impacts are determined to be potentially significant, mitigation is listed here. A statement of the level of significance before application of any mitigation measures is provided in bold.

Mitigation Measure 3.X-1 *Recommended mitigation measure will be presented here and numbered to match the impact.*

Where appropriate, one or more potentially feasible mitigation measures are described.

SIGNIFICANCE AFTER MITIGATION

A statement of the degree to which the available mitigation measure(s) would reduce the significance of the impact is described here and included in **bold**.

CUMULATIVE IMPACTS

An analysis of cumulative impacts follows the evaluation of Project-specific impacts and mitigation measures in each section. A cumulative impact is an impact that is created as a result of the combination of the project evaluated in the EIR in conjunction with other past, present, and reasonably foreseeable projects causing related impacts.[5] The cumulative impact analysis in this EIR evaluates the buildout of the proposed Housing Rezone Program and General Plan Amendment, which encompasses growth and projects anticipated to be developed during buildout of the City of Tracy General Plan. Other planning documents, such as regional plans, may be used, as appropriate.

[5] CEQA Guidelines Section 15355.

The beginning of the cumulative impact analysis in each technical section includes a description of the cumulative analysis methodology and the geographic or temporal context in which the cumulative impact is analyzed (e.g., the City of Tracy, the San Joaquin Valley Air Quality Management District, San Joaquin County projections, other activity concurrent with project construction). In some instances, a Project-specific impact may be less than significant, but when considered in conjunction with other cumulative projects or activities, may be significant or potentially significant. As noted above, where a cumulative impact would be significant when compared to existing or baseline conditions, the analysis must address whether the Project's contribution to the significant cumulative impact is "considerable." If the contribution of the Project is considerable, then the EIR must identify potentially feasible measures that could avoid or reduce the magnitude of the project's contribution to a less-than-considerable level. If the Project's contribution is not considerable, the cumulative impact would be less than significant and no mitigation of the Project's contribution is required.[6] The cumulative impacts analysis is formatted in the same manner as the Project-specific impacts.

[6] CEQA Guidelines Section 15130(a)(3).

This section describes the regional air quality, current attainment status of the air basin, local sensitive receptors, emission sources, and impacts that are likely to result from Project implementation. The analysis contained in this section is intended to be at a project-level, and covers impacts associated with the conversion of the entire Master Plan site to urban uses. Following this discussion is an assessment of consistency of the proposed Project with applicable policies and local plans. The Greenhouse Gases and Climate Change analysis is in a separate section of this document. This section is based in part on the following technical studies: *Air Quality and Land Use Handbook: A Community Health Perspective* (California Air Resources Board [CARB], 2007), *Guide for Assessing and Mitigation Air Quality Impacts* (San Joaquin Valley Air Pollution Control District [SJAVPCD], 2002), and *Guidance for Assessing and Mitigating Air Quality Impacts - 2015* (SJAVPCD, 2015). The section also includes the model results from the California Emissions Estimator Model (CalEEMod v. 2022.1).

One comment regarding air quality was received during the public review period of scoping meeting for the Notice of Preparation regarding this topic. The comment letter recommends that the proposed Project be analyzed in accordance with the District's Guidance for Assessing and Mitigating Air Quality Impacts, and provides other recommendations for how to analyze the Project as part of the EIR, as well as a list of potential Air District rules and regulations that may be applicable to the proposed Project. This comment letter is addressed within this section. The full comment is included in Appendix A.

3.1.1 ENVIRONMENTAL SETTING

SAN JOAQUIN VALLEY AIR BASIN

The City of Tracy (City) is in the northern portion of the San Joaquin Valley Air Basin (SJVAB). The SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Tulare, Madera, Merced, San Joaquin, and Stanislaus. Air pollution from significant activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

The SJVAB is approximately 250 miles long and an average of 35 miles wide. It is bordered by the Sierra Nevada in the east, the Coast Ranges in the west, and the Tehachapi Mountains in the south. There is a slight downward elevation gradient from Bakersfield in the southeast end (elevation 408 feet) to sea level at the northwest end where the valley opens to the San Francisco Bay at the Carquinez Straits. At its northern end is the Sacramento Valley, which comprises the northern half of California's Central Valley. The bowl-shaped topography inhibits movement of pollutants out of the valley.[1]

Climate

The SJVAB is in a Mediterranean climate zone and is influenced by a subtropical high-pressure cell most of the year. Mediterranean climates are characterized by sparse rainfall, which occurs mainly in winter. Summers are hot and dry. Summertime maximum temperatures often exceed 100°F in the valley.

[1] San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2025. Available at: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

The subtropical high-pressure cell is strongest during spring, summer, and fall and produces subsiding air, which can result in temperature inversions in the valley. A temperature inversion can act like a lid, inhibiting vertical mixing of the air mass at the surface. Any emissions of pollutants can be trapped below the inversion. Most of the surrounding mountains are above the normal height of summer inversions (1,500 to 3,000 feet).

Winter-time high pressure events can often last many weeks, with surface temperatures often lowering into the 30°F. During these events, fog can be present and inversions are extremely strong. These wintertime inversions can inhibit vertical mixing of pollutants to a few hundred feet.[2]

Wind Patterns

Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing and transporting it to other locations.

Especially in summer, winds in the San Joaquin Valley most frequently blow from the northwest. The region's topographic features restrict air movement and channel the air mass towards the southeastern end of the valley. Marine air can flow into the basin from the San Joaquin River Delta and over Altamont Pass and Pacheco Pass, where it can flow along the axis of the valley, over the Tehachapi Pass, into the Southeast Desert Air Basin. This wind pattern contributes to transporting pollutants from the Sacramento Valley and the Bay Area into the SJVAB. Approximately 27 percent of the total emissions in the northern portion, 11 percent of total emissions in the central region, and 7 percent of total emission in the south valley of the SJVAB are attributed to air pollution transported from these two areas.[3] The Coastal Range is a barrier to air movement to the west and the high Sierra Nevada Range is a significant barrier to the east (the highest peaks in the southern Sierra Nevada reach almost halfway through the Earth's atmosphere). Many days in the winter are marked by stagnation events where winds are very weak. Transport of pollutants during winter can be very limited. A secondary but significant summer wind pattern is from the southeast and can be associated with nighttime drainage winds, prefrontal conditions, and summer monsoons.

Two significant diurnal wind cycles that occur frequently in the valley are the sea breeze and mountain-valley upslope and drainage flows. The sea breeze can accentuate the northwest wind flow, especially on summer afternoons. Nighttime drainage flows can accentuate the southeast movement of air down the valley. In the mountains during periods of weak synoptic scale winds, winds tend to be upslope during the day and downslope at night. Nighttime and drainage flows are especially pronounced during the winter when flow from the easterly direction is enhanced by nighttime cooling in the Sierra Nevada. Eddies can form in the valley wind flow and can recirculate a polluted air mass for an extended period.

[2] San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2025. Available at: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

[3] SJVAPCD. Frequently Asked Questions, http://www.valleyair.org/general_info/frequently_asked_questions.htm#What%20is%20being%20done%20to%20improve%20ai r%20quality%20in%20the%20San%20Joaquin%20Valley, accessed August 6, 2024.

Temperature

Solar radiation and temperature are particularly important in the chemistry of ozone formation. The SJVAB averages over 260 sunny days per year. Photochemical air pollution (primarily ozone) is produced by the atmospheric reaction of organic substances (such as volatile organic compounds) and nitrogen dioxide under the influence of sunlight. Ozone concentrations are very dependent on the amount of solar radiation, especially during late spring, summer, and early fall. Ozone levels typically peak in the afternoon. After the sun goes down, the chemical reaction between nitrous oxide and ozone begins to dominate. This reaction tends to scavenge and remove the ozone in the metropolitan areas through the early morning hours, resulting in the lowest ozone levels, possibly reaching zero at sunrise in areas with high nitrogen oxides emissions. At sunrise, nitrogen oxides tend to peak, partly due to low levels of ozone currently and due to the morning commuter vehicle emissions of nitrogen oxides.

Generally, the higher the temperature, the more ozone formed, since reaction rates increase with temperature. However, extremely hot temperatures can "lift" or "break" the inversion layer. Typically, if the inversion layer does not lift to allow the buildup of contaminants to be dispersed, the ozone levels will peak in the late afternoon. If the inversion layer breaks and the resultant afternoon winds occur, the ozone will peak in the early afternoon and decrease in the late afternoon as the contaminants are dispersed or transported out of the SJVAB.

Ozone levels are low during winter periods when there is much less sunlight to drive the photochemical reaction.[4]

Precipitation, Humidity, and Fog

Precipitation and fog may reduce or limit some pollutant concentrations. Ozone needs sunlight for its formation, and clouds and fog can block the required solar radiation. Wet fogs can cleanse the air during winter as moisture collects on particles and deposits them on the ground. Atmospheric moisture can also increase pollution levels. In fogs with less water content, the moisture acts to form secondary ammonium nitrate particulate matter. This ammonium nitrate is part of the valley's $PM_{2.5}$ and PM_{10} problem. The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the SJVAB floor. This creates strong low-level temperature inversions and very stable air conditions, which can lead to tule fog. Wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of $PM_{2.5}$ and PM_{10}.[5]

Inversions

The vertical dispersion of air pollutants in the San Joaquin Valley can be limited by persistent temperature inversions. Air temperature in the lowest layer of the atmosphere typically decreases with altitude. A reversal of this atmospheric state, where the air temperature increases with height, is termed an inversion. The height of the base of the inversion is known as the "mixing height." This is the level to which

[4] San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2025. Available at: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

[5] San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2025. Available at: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

pollutants can mix vertically. Mixing of air is minimized above and below the inversion base. The inversion base represents an abrupt density change where little air movement occurs.

Inversion layers are significant in determining pollutant concentrations. Concentration levels can be related to the amount of mixing space below the inversion. Temperature inversions that occur on the summer days are usually 2,000 to 2,500 feet above the valley floor. In winter months, overnight inversions occur 500 to 1,500 feet above the valley floor.[6]

CRITERIA POLLUTANTS

All criteria pollutants can have human health and environmental effects at certain concentrations. The United States Environmental Protection Agency (U.S. EPA) uses six "criteria pollutants" as indicators of air quality and has established for each of them a maximum concentration above which adverse effects on human health may occur. These threshold concentrations are called National Ambient Air Quality Standards (NAAQS). In addition, California establishes ambient air quality standards, called California Ambient Air Quality Standards (CAAQS). California law does not require that the CAAQS be met by a specified date as is the case with NAAQS.

The ambient air quality standards for the six criteria pollutants (as shown in **Table 3.1-1**) are set to public health and the environment within an adequate margin of safety (as provided under Section 109 of the Federal Clean Air Act). Epidemiological, controlled human exposure, and toxicology studies evaluate potential health and environmental effects of criteria pollutants, and form the scientific basis for new and revised ambient air quality standards. Principal characteristics and possible health and environmental effects from exposure to the six primary criteria pollutants generated by the Project are discussed below.

Ozone (O_3) is a photochemical oxidant and the major component of smog. While O_3 in the upper atmosphere is beneficial to life by shielding the earth from harmful ultraviolet radiation from the sun, high concentrations of O_3 at ground level are a major health and environmental concern. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of volatile organic compounds (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. These reactions are stimulated by sunlight and temperature so that peak O_3 levels occur typically during the warmer times of the year. Both ROGs and NO_x are emitted by transportation and industrial sources. ROGs are emitted from sources as diverse as autos, chemical manufacturing, dry cleaners, paint shops and other sources using solvents. Relatedly, reactive organic compounds (ROG) are defined as the subset of ROGs that are reactive enough to contribute substantially to atmospheric photochemistry.

The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This

[6] San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. March 19, 2025. Available at: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term ozone exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to ozone may increase the risk of respiratory-related deaths.[7] The concentration of ozone at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of ozone and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggest that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum ozone concentration reaches 80 parts per billion.[8] The average background level of ozone in the California and Nevada is approximately 48.3 parts per billion, which represents approximately 77 percent of the total ozone in the western region of the United States.[9]

In addition to human health effect, ozone has been tied to crop damage, typically in the form of stunted growth, leaf discoloration, cell damage, and premature death. O_3 can also act as a corrosive and oxidant, resulting in property damage such as the degradation of rubber products and other materials.

Carbon monoxide (CO) is a colorless, odorless and poisonous gas produced by incomplete burning of carbon in fuels. Carbon monoxide is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Exposure to CO at high concentrations can also cause fatigue, headaches, confusion, dizziness, and chest pain. There are no ecological or environmental effects to ambient CO.[10]

Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart

[7] United States Environmental Protection Agency (USEPA). 2024. Health Effects of Ozone Pollution. Last Updated on April 9, 2024. Available: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

[8] United States Environmental Protection Agency (USEPA). 2024. Health Effects of Ozone In the General Population. Last Updated on May 16, 2024. Available: https://www.epa.gov/ozone-pollution-and-your-patients-health/health-effects-ozone-general-population.

[9] National Aeronautics and Space Administration (NASA). Jet Propulsion Laboratory. 2015. NASA: Background Ozone is a Major Issue in U.S. West. September 28, 2015. Available: https://www.jpl.nasa.gov/news/news.php?feature=4723

[10] California Air Resources Board. 2024. Carbon Monoxide and Health. Available: https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health.

accompanied by chest pain also known as angina.[11] Such acute effects may occur under current ambient conditions for some sensitive individuals, while increases in ambient CO levels increases the risk of such incidences.

Nitrogen oxides (NO_x) is a brownish, highly reactive gas that is present in all urban atmospheres. The main effect of increased NO_2 is the increased likelihood of respiratory problems. Under ambient conditions, NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections. Nitrogen oxides are an important precursor both to ozone (O_3) and acid rain and may affect both terrestrial and aquatic ecosystems. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO_2.

The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO_x). NO_x plays a major role, together with ROGs, in the atmospheric reactions that produce O_3. NO_x forms when fuel is burned at high temperatures. The two major emission sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers.

Sulfur dioxide (SO_2) is one of the multiple gaseous oxidized sulfur species and is formed during the combustion of fuels containing sulfur, primarily coal and oil. The largest anthropogenic source of SO_2 emissions in the U.S. is fossil fuel combustion at electric utilities and other industrial facilities. SO_2 is also emitted from certain manufacturing processes and mobile sources, including locomotives, large ships, and construction equipment.

SO_2 affects breathing and may aggravate existing respiratory and cardiovascular disease in high doses. Sensitive populations include asthmatics, individuals with bronchitis or emphysema, children and the elderly. SO_2 is also a primary contributor to acid deposition, or acid rain, which causes acidification of lakes and streams and can damage trees, crops, historic buildings and statues. In addition, sulfur compounds in the air contribute to visibility impairment in large parts of the country. This is especially noticeable in national parks. Ambient SO_2 results largely from stationary sources such as coal and oil combustion, steel mills, refineries, pulp and paper mills and from nonferrous smelters.

Short-term exposure to ambient SO_2 has been associated with various adverse health effects. Multiple human clinical studies, epidemiological studies, and toxicological studies support a causal relationship between short-term exposure to ambient SO_2 and respiratory morbidity. The observed health effects include decreased lung function, respiratory symptoms, and increased emergency department visits and hospitalizations for all respiratory causes. These studies further suggest that people with asthma are potentially susceptible or vulnerable to these health effects. In addition, SO_2 reacts with other air pollutants to form sulfate particles, which are constituents of fine particulate matter ($PM_{2.5}$). Inhalation

[11] United States Environmental Protection Agency (USEPA). 2024. Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Last Updated on June 21, 2024. Available: https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#Effects.

exposure to $PM_{2.5}$ has been associated with various cardiovascular and respiratory health effects.[12] Increased ambient SO_2 levels would lead to increased risk of such effects.

SO_2 emissions that lead to high concentrations of SO_2 in the air generally also lead to the formation of other sulfur oxides (SOx). SOx can react with other compounds in the atmosphere to form small particles. These particles contribute to particulate matter (PM) pollution. Small particles may penetrate deeply into the lungs and in sufficient quantity can contribute to health problems.

Particulate matter (PM) includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. Particles formed in the atmosphere by condensation or the transformation of emitted gases such as SO_2 and ROGs are also considered particulate matter. PM is generally categorized based on the diameter of the particulate matter: PM_{10} is particulate matter 10 micrometers or less in diameter (known as respirable particulate matte*r*), and $PM_{2.5}$ is particulate matter 2.5 micrometers or less in diameter (known as fine particulate matter).

Based on studies of human populations exposed to high concentrations of particles (sometimes in the presence of SO_2) and laboratory studies of animals and humans, there are major effects of concern for human health. These include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. Small particulate pollution causes health impacts even at very low concentrations – indeed no threshold has been identified below which no damage to health is observed.

Respirable particulate matter (PM_{10}) consists of small particles, less than 10 microns in diameter, of dust, smoke, or droplets of liquid which penetrate the human respiratory system and cause irritation by themselves, or in combination with other gases. Particulate matter is caused primarily by dust from grading and excavation activities, from agricultural activities (as created by soil preparation activities, fertilizer and pesticide spraying, weed burning and animal husbandry), and from motor vehicles, particularly diesel-powered vehicles. PM_{10} causes a greater health risk than larger particles, since these fine particles can more easily penetrate the defenses of the human respiratory system.

$PM_{2.5}$ consists of fine particles that are less than 2.5 microns in size. Similar to PM_{10}, these particles are primarily the result of combustion in motor vehicles, particularly diesel engines, as well as from industrial sources and residential/agricultural activities such as burning. It is also formed through the reaction of other pollutants. As with PM_{10}, these particulates can increase the chance of respiratory disease, and cause lung damage and cancer. In 1997, the U.S. EPA created new Federal air quality standards for $PM_{2.5}$.

Although neither the U.S. EPA nor the California air districts have provided any thresholds for ultrafine particles (UFPs) (defined as fine particles of less than 0.1 microns in size, or $PM_{0.1}$), it should be noted that such particles may have the potential for even greater health effects than PM_{10} or $PM_{2.5}$, due to their even smaller sizes. UFPs are primarily generated by motor vehicle emissions (especially from diesel engines),

[12] United States Environmental Protection Agency (USEPA). 2022. Sulfur Dioxide Concentrations – EPA. Available: https://cfpub.epa.gov/roe/indicator_pdf.cfm?i=91.

braking, and tire wear. Specifically, UFPs are comprised mostly of metals that are known constituents of brake pads and drums, as well as additives in motor oil. Generally, all engines can create UFPs, but especially diesel engines, and any vehicle's braking system; traffic, particularly start-and-stop, generates UFPs.[13] Recent research suggests that UFPs pose considerable health risks, similar to but tending to be more severe than PM_{10} and $PM_{2.5}$, such as increased risk of cardiovascular disease and ischemic heart disease death rates, and loss of lung function.[14] Furthermore, unlike diesel exhaust or other larger TAC emissions, UFPs are more persistent and do not dissipate easily over distances.[15]

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials and is a major cause of visibility impairment.

The major subgroups of the population that appear to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary or cardiovascular disease or influenza, asthmatics, the elderly and children. Particulate matter also impacts soils and damages materials and is a major cause of visibility impairment.

Numerous studies have linked PM exposure to premature death in people with preexisting heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lunch function, and increased respiratory symptoms. Studies show that every 1 microgram per cubic meter reduction in $PM_{2.5}$ results in a one percent reduction in mortality rate for individuals over 30 years old.[16] Long-term exposures, such as those experienced by people living for many years in areas with high PM levels, have been associated with problems such as reduced lung function and the development of chronic bronchitis – and even premature death. Additionally, depending on its composition, both PM_{10} and $PM_{2.5}$ can also affect water quality and acidity, deplete soil nutrients, damage sensitive forests and crops, affect ecosystem diversity, and contribute to acid rain.[17]

Lead (Pb) exposure can occur through multiple pathways, including inhalation of air and ingestion of Pb in food, water, soil or dust. Once taken into the body, lead distributes throughout the body in the blood and is accumulated in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the

[13] Aerosol Science and Technology. 2011. Thomas A. Cahill, David E. Barnes, Nicholas J. Spada, Jonathan A. Lawton, and Thomas M. Cahill. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 2003-2007. July 13, 2011.
[14] Atmospheric Environment. 2016. Thomas A. Cahill, David E. Barnes, Leann Wuest, David Gribble, David Buscho, Roger S. Miller, Camille De la Croix. Artificial Ultra-fine Aerosol Tracers for Highway Transect Studies. April 7, 2016;
Aerosol Science and Technology. 2011. Thomas A. Cahil, David E. Barnes, Earl Withycombe, & Mitchell Watnik, and DELTA Group. Very Fine and Ultrafine Metals and Ischemic Heart Disease in the California Central Valley 1: 1974-1991. July 13, 2011.
[15] Atmospheric Environment. 2016. Transition Metals in Coarse, Fine, Very Fine and Ultra-fine Particles from an Interstate Highway Transect Near Detroit. September 12, 2016.
[16] Bay Area Air Quality Management District (BAAQMD). 2017. Spare the Air: Cool the Climate. April. San Francisco, CA. Adopted April 19, 2017. Available: http://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en.
[17] United States Environmental Protection Agency (USEPA). 2024. Health and Environmental Effects of Particulate Matter (PM). Last Updated on July 16, 2024. Available: https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm.

cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood. Excessive Pb exposure can cause seizures, mental retardation and/or behavioral disorders. Low doses of Pb can lead to central nervous system damage. Recent studies have also shown that Pb may be a factor in high blood pressure and subsequent heart disease.

Lead is persistent in the environment and can be added to soils and sediments through deposition from sources of lead air pollution. Other sources of lead to ecosystems include direct discharge of waste streams to water bodies and mining. Elevated lead in the environment can result in decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates.

Lead exposure is typically associated with industrial sources; major sources of lead in the air are ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. The highest air concentrations of lead are usually found near lead smelters. As a result of the U.S. EPA's regulatory efforts, including the removal of lead from motor vehicle gasoline, levels of lead in the air decreased by 98 percent between 1980 and 2014.[18] Based on this reduction of lead in the air over this period, and since most new developments to not generate an increase in lead exposure, the health impacts of ambient lead levels are not typically monitored by the California Air Resources Board (CARB).

AMBIENT AIR QUALITY STANDARDS

Both the U.S. EPA and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards represent safe levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The federal and State ambient air quality standards are summarized in Table 3.1-1 for important pollutants. The federal and State ambient standards were developed independently, although both processes were aimed at avoiding health-related effects. As a result, the federal and State standards differ in some cases. In general, the California standards are more stringent. This is particularly true for ozone, $PM_{2.5}$, and PM_{10}. The U.S. EPA signed a final rule for the federal ozone eight-hour standard of 0.070 ppm on October 1, 2015, which was effective as of December 28, 2015 (equivalent to the California state ambient air quality eight-hour standard for ozone).

[18] United States Environmental Protection Agency (USEPA). 2024. Basic Information About Lead Pollution. Last Updated on June 13, 2024. Available: https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution#how.

TABLE 3.1-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

POLLUTANT	AVERAGING TIME	FEDERAL PRIMARY STANDARD	STATE STANDARD
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.03 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	0.03 ppm	--
	24-Hour	0.14 ppm	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	--	20 ug/m^3
	24-Hour	150 ug/m^3	50 ug/m^3
$PM_{2.5}$	Annual	12 ug/m^3	12 ug/m^3
	24-Hour	35 ug/m^3	--
Lead	30-Day Avg.	--	1.5 ug/m^3
	3-Month Avg.	0.15 ug/m^3	--

NOTES: PPM = PARTS PER MILLION, UG/M3 = MICROGRAMS PER CUBIC METER

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2024. CALIFORNIA AMBIENT AIR QUALITY STANDARDS (CAAQS). AVAILABLE: HTTP://WWW.ARB.CA.GOV/RESEARCH/AAQS/CAAQS/CAAQS.HTM

In 1997, new national standards for fine particulate matter diameter 2.5 microns or less ($PM_{2.5}$) were adopted for 24-hour and annual averaging periods. The existing PM_{10} standards were retained, but the method and form for determining compliance with the standards were revised.

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. TACs are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants. Unlike criteria pollutants, TACs are regulated based on risk rather than specification of safe levels of contamination.

Existing air quality concerns within San Joaquin County and the entire air basin are related to increases of regional criteria air pollutants (e.g., ozone and particulate matter), exposure to toxic air contaminants, odors, and increases in greenhouse gas emissions contributing to climate change. The primary source of ozone (smog) pollution is motor vehicles which account for 70 percent of the ozone in the region. Particulate matter is caused by dust, primarily dust generated from construction and grading activities, and smoke which is emitted from fireplaces, wood-burning stoves, and agricultural burning.

Attainment Status

In accordance with the California Clean Air Act (CCAA), the CARB is required to designate areas of the State as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria.

Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either an attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for ozone, carbon monoxide, and nitrogen dioxide as "does not meet the primary standards," "cannot be classified," or "better than national standards." For sulfur dioxide, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the CARB terminology of attainment, nonattainment, and unclassified is more frequently used.

San Joaquin County has a State designation Attainment or Unclassified for all criteria pollutants except for ozone, PM_{10} and $PM_{2.5}$. San Joaquin County has a national designation of either Unclassified or Attainment for all criteria pollutants except for Ozone and $PM_{2.5}$. **Table 3.1-2** presents the state and nation attainment status for San Joaquin County.

TABLE 3.1-2: STATE AND NATIONAL ATTAINMENT STATUS IN SAN JOAQUIN COUNTY

CRITERIA POLLUTANTS	STATE DESIGNATIONS	NATIONAL DESIGNATIONS
Ozone (O_3)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (NO_2)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Unclassified/Attainment
Sulfates	Attainment	
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	
Visibility Reducing Particles	Unclassified	

SOURCE: CALIFORNIA AIR RESOURCES BOARD, 2024. AMBIENT AIR QUALITY STANDARDS DESIGNATION TOOL. AVAILABLE: HTTPS://WW2.ARB.CA.GOV/AAQS-DESIGNATION-TOOL

San Joaquin County Air Quality Monitoring

The San Joaquin Valley Air Pollution District (SJVAPCD) and the CARB maintain air quality monitoring sites throughout San Joaquin County that collect data for ozone and $PM_{2.5}$. In addition, air quality monitoring sites for PM_{10} are located throughout the San Joaquin Valley (though not in San Joaquin County). The closest air quality monitoring station to the Planning Area is the Tracy-Airport location. It is important to note that while the State retains the one-hour ozone standard, the federal ozone 1-hour standard was revoked by the U.S. EPA and is no longer applicable for federal standards. Best available data obtained from the monitoring sites between 2019 and 2021 is shown in **Table 3.1-3**, **Table 3.1-4**, and **Table 3.1-5**.

TABLE 3.1-3 AMBIENT AIR QUALITY MONITORING DATA SUMMARY (TRACY-AIRPORT)* - OZONE

YEAR	DAYS > STANDARD				1-HOUR OBSERVATIONS			8-HOUR AVERAGES				YEAR COVERAGE	
	STATE		NATIONAL			STATE	NAT'L	STATE		NATIONAL			
	1-HR	8-HR	1-HR	8-HR	MAX.	D.V.[1]	D.V.[2]	MAX.	D.V.[1]	MAX.	D.V.[2]	MIN	MAX
2021	0	3	0	3	0.089	0.09	0.087	0.078	0.077	0.077	0.068	96	98
2020	0	3	0	3	0.086	0.09	0.092	0.078	0.082	0.078	0.070	95	96
2019	1	3	0	3	0.095	0.09	0.092	0.080	0.082	0.079	0.073	97	99

*NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. THE NATIONAL 1-HOUR OZONE STANDARD WAS REVOKED IN JUNE 2005 AND IS NO LONGER IN EFFECT. STATISTICS RELATED TO THE REVOKED STANDARD ARE SHOWN IN ITALICS. D.V. [1]= STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE. *TRACY-AIRPORT REPRESENTS THE CLOSEST MONITORING STATION TO THE PLANNING AREA.*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES. 2024. AVAILABLE: HTTPS://WWW.ARB.CA.GOV/ADAM/

TABLE 3.1-4: AMBIENT AIR QUALITY MONITORING DATA SUMMARY (SAN JOAQUIN VALLEY)* – PM_{10}

YEAR	EST. DAYS > STD.		ANNUAL AVERAGE		HIGH 24-HR AVERAGE		YEAR COVERAGE
	NAT'L	STATE	NAT'L	STATE	NAT'L	STATE	
2021	16.3	151.7	54.9	52.8	437.5	439.3	0 - 97
2020	38.7	157.0	64.5	60.5	517.2	359.0	0 - 100
2019	16.2	129.7	55.6	55.6	652.2	664.2	0 – 100

*NOTES: THE NATIONAL ANNUAL AVERAGE PM_{10} STANDARD WAS REVOKED IN DECEMBER 2006 AND IS NO LONGER IN EFFECT. AN EXCEEDANCE IS NOT NECESSARILY A VIOLATION. STATISTICS MAY INCLUDE DATA THAT ARE RELATED TO AN EXCEPTIONAL EVENT. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. NATIONAL STATISTICS ARE BASED ON STANDARD CONDITIONS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. *THIS DATA REPRESENTS THE HIGHEST VALUES IDENTIFIED WITHIN SAN JOAQUIN VALLEY AS A WHOLE. DATA FOR THE NEAREST MONITORING SITE (TRACY-AIRPORT), AS WELL AS FOR SAN JOAQUIN COUNTY, HAD INSUFFICIENT DATA.*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES. 2024. AVAILABLE: HTTPS://WWW.ARB.CA.GOV/ADAM/

TABLE 3.1-5 AMBIENT AIR QUALITY MONITORING DATA SUMMARY (SAN JOAQUIN COUNTY)* - $PM_{2.5}$

YEAR	EST. DAYS > NAT'L '06 STD.	ANNUAL AVERAGE		NAT'L ANN. STD. D.V.[1]	STATE ANNUAL D.V.[2]	NAT'L '06 STD. 98TH PERCENTILE	NAT'L '06 24-HR STD. D.V.[1]	HIGH 24-HOUR AVERAGE		YEAR COVERAGE	
		NAT'L	STATE					NAT'L	STATE	MIN	MAX
2021	1.3	11.7	ND	ND	15	39.9	52	58.7	58.7	14	100
2020	24.0	14.8	14.8	13.7	17	91.6	72	140.0	140.0	98	99
2019	6.4	9.3	6.2	13.0	17	32.9	56	50.1	50.1	77	95

*NOTES: ALL CONCENTRATIONS EXPRESSED IN PARTS PER MILLION. STATE AND NATIONAL STATISTICS MAY DIFFER FOR THE FOLLOWING REASONS: STATE STATISTICS ARE BASED ON CALIFORNIA APPROVED SAMPLERS, WHEREAS NATIONAL STATISTICS ARE BASED ON SAMPLERS USING FEDERAL REFERENCE OR EQUIVALENT METHODS. STATE AND NATIONAL STATISTICS MAY THEREFORE BE BASED ON DIFFERENT SAMPLERS. STATE CRITERIA FOR ENSURING THAT DATA ARE SUFFICIENTLY COMPLETE FOR CALCULATING VALID ANNUAL AVERAGES ARE MORE STRINGENT THAN THE NATIONAL CRITERIA. D.V. [1] = STATE DESIGNATION VALUE. D.V. [2]= NATIONAL DESIGN VALUE. *THIS DATA REPRESENTS THE HIGHEST VALUES IDENTIFIED WITHIN SAN JOAQUIN COUNTY AS A WHOLE. DATA FOR THE NEAREST MONITORING SITE (TRACY-AIRPORT) HAS INSUFFICIENT DATA. ND = NO DATA*

SOURCE: CALIFORNIA AIR RESOURCES BOARD (AEROMETRIC DATA ANALYSIS AND MANAGEMENT SYSTEM OR IADAM) AIR POLLUTION SUMMARIES. 2024. AVAILABLE: HTTPS://WWW.ARB.CA.GOV/ADAM/

ODORS

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another.

It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air.

When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases. A sensitive receptor is a location where human populations, especially children, seniors, and sick persons, are present and where there is a reasonable expectation of continuous human exposure to pollutants. Examples of sensitive receptors include residences, hospitals, and schools. The closest sensitive receptors to the Planning Area include existing residences located within the Planning Area itself.

3.1.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: NAAQS for criteria air pollutants, hazardous air pollutant standards, state attainment plans, motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The U.S. EPA is responsible for administering the FCAA. The FCAA requires the U.S. EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health (with an adequate margin of safety, including for sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases), and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

NAAQS standards define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Existing violations of the ozone and $PM_{2.5}$ ambient air quality standards indicate that certain individuals exposed to these pollutants may experience certain health effects, including increased incidence of cardiovascular and respiratory ailments.

NAAQS standards have been designed to accurately reflect the latest scientific knowledge and are reviewed every five years by a Clean Air Scientific Advisory Committee (CASAC), consisting of seven members appointed by the U.S. EPA Administrator. Reviewing NAAQS is a lengthy undertaking and includes the following major phases: Planning, Integrated Science Assessment (ISA), Risk/Exposure Assessment (REA), Policy Assessment (PA), and Rulemaking. The process starts with a comprehensive review of the relevant scientific literature. The literature is summarized and conclusions are presented in the ISA. Based on the ISA, U.S. EPA staff perform a risk and exposure assessment, which is summarized in the REA document. The third document, the PA, integrates the findings and conclusions of the ISA and REA into a policy context, and provides lines of reasoning that could be used to support retention or revision of the existing NAAQS, as well as several alternative standards that could be supported by the review findings. Each of these three documents are released for public comment and public peer review by the CASAC. Members of CASAC are appointed by the U.S. EPA Administrator for their expertise in one or more of the subject areas covered in the ISA. The CASAC's role is to peer review the NAAQS documents, ensure that they reflect the thinking of the scientific community, and advise the Administrator on the technical and scientific aspects of standard setting. Each document goes through two to three drafts before CASAC deems it to be final.

Although there is some variability among the health effects of the NAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations, and

emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. NAAQS standards were last revised for each of the six criteria pollutant as listed below, with detail on what aspects of NAAQS changed during the most recent update:

- Ozone: On October 1, 2015, the U.S. EPA lowered the national eight-hour standard from 0.075 ppm to 0.070 ppm, providing for a more stringent standards consistent with the current California state standard.
- CO: In 2011, the primary standards were retained from the original 1971 level, without revision. The secondary standards were revoked in 1985.
- NO_2: The national NO_2 standard was most recently revised in 2010 following an exhaustive review of new literature pointed to evidence for adverse effects in asthmatics at lower NO_2 concentrations than the existing national standard.
- SO_2: On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99^{th} percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb.
- PM: the national annual average $PM_{2.5}$ standard was most recently revised in 2012 following an exhaustive review of new literature pointed to evidence for increased risk of premature mortality at lower $PM_{2.5}$ concentrations than the existing standard.
- Lead: The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. In 2016, the primary and secondary standards were retained.

The law recognizes the importance for each state to locally carry out the requirements of the FCAA, as special consideration of local industries, geography, housing patterns, etc. are needed to have full comprehension of the local pollution control problems. As a result, the U.S. EPA requires each state to develop a State Implementation Plan (SIP) that explains how each state will implement the FCAA within their jurisdiction. A SIP is a collection of rules and regulations that a particular state will implement to control air quality within their jurisdiction. The CARB is the state agency that is responsible for preparing the California SIP.

Transportation Conformity

Transportation conformity requirements were added to the FCAA in the 1990 amendments, and the U.S. EPA adopted implementing regulations in 1997. See §176 of the FCAA (42 U.S.C. §7506) and 40 CFR Part 93, Subpart A. Transportation conformity serves much the same purpose as general conformity: it ensures that transportation plans, transportation improvement programs, and projects that are developed, funded, or approved by the United States Department of Transportation or that are recipients of funds under the Federal Transit Act or from the Federal Highway Administration (FHWA), conform to the SIP as approved or promulgated by U.S. EPA.

Currently, transportation conformity applies in nonattainment areas and maintenance areas. Under transportation conformity, a determination of conformity with the applicable SIP must be made by the agency responsible for the proposed Project, such as the Metropolitan Planning Organization, the Council of Governments, or a federal agency. The agency making the determination is also responsible for all the

requirements relating to public participation. Generally, a project will be considered in conformance if it is in the transportation improvement plan and the transportation improvement plan is incorporated in the SIP. If an action is covered under transportation conformity, it does not need to be separately evaluated under general conformity.

Transportation Control Measures

One aspect of the SIP development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

STATE

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The CARB administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six pollutants subject to federal standards listed above as well as visibility reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The U.S. EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the federal CAA are less stringent than the CCAA; therefore, consistency with the CCAA will also demonstrate consistency with the federal CAA.

CARB Mobile-Source Regulation

The State of California is responsible for controlling emissions from the operation of motor vehicles in the State. Rather than mandating the use of specific technology or the reliance on a specific fuel, the CARB motor vehicle standards specify the allowable grams of pollution per mile driven. In other words, the regulations focus on the reductions needed rather than on the manner in which they are achieved. Towards this end, the CARB has adopted regulations that require auto manufacturers to phase in less-polluting vehicles.

California Air Quality Standards

Although NAAQS are determined by the U.S. EPA, states have the ability to set standards that are more stringent than the federal standards. As such, California established more stringent ambient air quality standards. Federal and state ambient air quality standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates and lead. In addition, California has

created standards for pollutants that are not covered by federal standards. Although there is some variability among the health effects of the CAAQS pollutants, each has been linked to multiple adverse health effects including, among others, premature death, hospitalizations and emergency department visits for exacerbated chronic disease, and increased symptoms such as coughing and wheezing. The existing state and federal primary standards for major pollutants are shown in Table 3.1-1.

Tanner Air Toxics Act (TACs)

California regulates TACs primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and has adopted U.S. EPA's list of Hazardous Air Pollutants (HAPs) as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technologies (BACT) to minimize emissions.

Toxic Air Contaminants Health Effects

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data. The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a DPM exposure method. This method uses

the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

Transportation Control Measures

The State Implementation Plan (SIP) describes the infrastructure (authorities, resources, and programs) California has in place to implement, maintain, and enforce the NAAQS. One particular aspect of the development process is the consideration of potential control measures as a part of making progress towards clean air goals. While most SIP control measures are aimed at reducing emissions from stationary sources, some are typically also created to address mobile or transportation sources. These are known as transportation control measures (TCMs). TCM strategies are designed to reduce vehicle miles traveled and trips, or vehicle idling and associated air pollution. These goals are achieved by developing attractive and convenient alternatives to single-occupant vehicle use. Examples of TCMs include ridesharing programs, transportation infrastructure improvements such as adding bicycle and carpool lanes, and expansion of public transit.

Omnibus Low-NOx Rule

CARB approved the Omnibus Low-NOx Rule on August 28, 2020, which will require engine NOx emissions to be cut to approximately 75% below current standards beginning in 2024, and 90% below current standards in 2027. The rule also places nine additional regulatory requirements on new heavy-duty trucks and engines. Those additional requirements include a 50% reduction in particulate matter emissions, stringent new low-load and idle standards, a new in-use testing protocol, extended deterioration requirements, a new California-only credit program, and extended mandatory warranty requirements. The regulatory requirements in the Omnibus Low-NOx Rule will first become effective in 2024, at the same time as the Advanced Clean Trucks regulations that CARB approved that require manufacturers to convert increasing percentages of their heavy-duty trucks sold in California to zero-emission vehicles.

Low Emission Vehicle Program

The CARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 State Implementation Plan (SIP). In 2012, the CARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.

On September 23, 2020, Governor Gavin Newsom issued Executive Order N-79-20 establishing a goal that 100 percent of new passenger cars and trucks sold in California shall be zero-emission by 2035. The Executive Order also sets a goal that, where feasible, all operations include zero-emission medium- and heavy-duty trucks by 2045, and drayage trucks by 2035. Off-road vehicles have a goal to transition to 100 percent zero-emission vehicles by 2035, where feasible.

On-Road Heavy-Duty Vehicle Program

The CARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The CARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.

California Air Resources Board Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the CARB adopted a regulation to reduce DPM and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The CARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014, for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter (PM) filter requirements beginning January 1, 2012. Lighter and older heavier trucks were required to be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.[19]

Diesel Risk Reduction Plan

The CARB's Diesel Risk Reduction Plan has led to the adoption of new State regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.[20]

[19] California Air Resources Board (CARB). 2021. Truck and Bus Regulation. Website: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed August 26, 2024.
[20] California Air Resources Board (CARB). 2021. Diesel Risk Reduction Plan. Website: https://ww2.arb.ca.gov/our-work/programs/diesel-risk-reduction-plan. Accessed August 26, 2024.

LOCAL

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to air quality. General Plan policies applicable to the Project are identified below:

POLICIES: AIR QUALITY ELEMENT

- AQ-1.1-P1. The City shall promote land use patterns that reduce the number and length of motor vehicle trips.
- AQ-1.1-P2. To the extent feasible, the City shall maintain a balance and match between jobs and housing.
- AQ-1.1-P4. Employment areas should include a mix of support services to minimize the number of trips.
- AQ-1.2-P1. The City shall assess air quality impacts using the latest version of the CEQA Guidelines and guidelines prepared by the San Joaquin Valley Air Pollution Control District.
- AQ-1.2-P2. The City shall assess through the CEQA process any air quality impacts of development projects that may be insignificant by themselves, but cumulatively significant.
- AQ-1.2-P3. Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.
- AQ-1.2-P4. New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.
- AQ-1.2-P5. Use of solar water and pool heaters is encouraged.
- AQ-1.2-P6. Installation of solar voltaic panels on new homes and businesses shall be encouraged.
- AQ-1.2-P7. Trees should be planted on the south- and west-facing sides of new buildings or buildings undergoing substantial renovation in order to reduce energy usage.
- AQ-1.2-P9. New developments shall follow the current requirements of the SJVAPCD with respect to wood burning fireplaces and heaters.
- AQ-1.2-P10. Stationary air pollutant emission sources (e.g. factories) shall be located an appropriate distance away and down-wind from residential areas and other sensitive receptors.
- AQ-1.2-P12. New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and, based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.
- AQ-1.2-P13. Dust control measures consistent with San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and all grading permits.
- AQ-1.2-P14. Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.
- AQ-1.2-P15. Encourage businesses to electrify loading docks or implement idling-reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.

- AQ-1.2-P16. Encourage the use of Best Management Practices in agriculture and animal operations.
- AQ-1.3-P1. The City shall continue to work with the San Joaquin Council of Governments on regional transportation solutions.
- AQ-1.3-P3. The City shall encourage employers to establish Transportation Demand Management programs.
- AQ-1.3-P5. The City shall require direct pedestrian and bicycle linkages from residential areas to parks, schools, retail areas, high-frequency transit facilities and major employment areas.

San Joaquin Valley Air Pollution Control District

The primary role of SJVAPCD is to develop plans and implement control measures in the SJVAB to control air pollution. These controls primarily affect stationary sources such as industry and power plants. Rules and regulations have been developed by SJVAPCD to control air pollution from a wide range of air pollution sources. SJVAPCD also provides uniform procedures for assessing potential air quality impacts of proposed projects and for preparing the air quality section of environmental documents.

AIR QUALITY PLANNING

The U.S. EPA requires states that have areas that do not meet the National AAQS to prepare and submit air quality plans showing how the National AAQS will be met. If the states cannot show how the National AAQS will be met, then the states must show progress toward meeting the National AAQS. These plans are referred to as the State Implementation Plans (SIP). California's adopted 2007 State Strategy was submitted to the U.S. EPA as a revision to its SIP in November 2007.[21] More recently, in October 2018, the CARB adopted the 2018 Updates to the California State Implementation Plan.

In addition, the CARB requires regions that do not meet California AAQS for ozone to submit clean air plans (CAPs) that describe measures to attain the standard or show progress toward attainment. To ensure federal CAA compliance, SJVAPCD is currently developing plans for meeting new National AAQS for ozone and $PM_{2.5}$ and the California AAQS for PM_{10} in the SJVAB (for California CAA compliance).[22] The following describes the air plans prepared by the SJVAPCD, which are incorporated by reference per CEQA Guidelines Section 15150.

1-HOUR OZONE PLAN

Although U.S. EPA revoked its 1979 1-hour ozone standard in June 2005, many planning requirements remain in place, and SJVAPCD must still attain this standard before it can rescind CAA Section 185 fees. The SJVAPCD's most recent 1-hour ozone plan, the 2013 Plan for the Revoked 1-hour Ozone Standard, demonstrated attainment of the 1-hour ozone standard by 2017. However, on July 18, 2016, the U.S. EPA published in the Federal Register a final action determining that SJVAB has attained the 1-hour ozone

[21] Note that the plan was adopted by CARB on September 27, 2007; California Air Resources Board. 2007. California Air Resources Board's Proposed State Strategy for California's 2007 State Implementation Plan.
[22] SJVAPCD, 2012. 2012 $PM_{2.5}$ Plan. Available: https://www.valleyair.org/air_quality_plans/pm25plans2012.htm.

NAAQS based on the 2012 to 2014 three-year period allowing nonattainment penalties to be lifted under federal Clean Air Act section 179b (SJVAPCD, 2015).

8-HOUR OZONE PLAN

The SJVAPCD's Governing Board adopted the 2007 Ozone Plan on April 30, 2007. This far-reaching plan, with innovative measures and a "dual path" strategy, assures expeditious attainment of the federal 8-hour ozone standard as set by U.S. EPA in 1997. The plan projects that the valley will achieve the 8-hour ozone standard for all areas of the SJVAB no later than 2023. The CARB approved the plan on June 14, 2007. The U.S. EPA approved the 2007 Ozone Plan effective April 30, 2012. SJVAPCD adopted the 2016 Ozone Plan to address the federal 2008 8-hour ozone standard, which must be attained by end of 2031.[23,24]

PM_{10} PLAN

Based on PM_{10} measurements from 2003 to 2006, the U.S. EPA found that the SJVAB has reached federal PM_{10} standards. On September 21, 2007, the SJVAPCD's Governing Board adopted the 2007 PM_{10} Maintenance Plan and Request for Redesignation. This plan demonstrates that the valley will continue to meet the PM_{10} standard. U.S. EPA approved the document and on September 25, 2008, the SJVAB was redesignated to attainment/maintenance.

PM2.5 PLAN

The SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards on November 15, 2018.[25] This plan addresses the U.S. EPA federal 1997 annual $PM_{2.5}$ standard of 15 µg/m³ and 24-hour $PM_{2.5}$ standard of 65 µg/m³; the 2006 24-hour $PM_{2.5}$ standard of 35 µg/m³; and the 2012 annual $PM_{2.5}$ standard of 12 µg/m³. This plan demonstrates attainment of the federal $PM_{2.5}$ standards as expeditiously as practicable.

All the above-referenced plans include measures (i.e., federal, state, and local) that would be implemented through rule making or program funding to reduce air pollutant emissions in the SJVAB. Transportation control measures are part of these plans.

SJVAPCD RULES AND REGULATIONS

SJVAPCD Indirect Source Review

On December 15, 2005, SJVAPCD adopted the Indirect Source Review Rule (ISR or Rule 9510) to reduce ozone precursors (i.e., ROG and NOx) and PM_{10} emissions from new land use development projects. Specifically, Rule 9510 targets the indirect emissions from vehicles and construction equipment associated with these projects and applies to both construction and operational-related impacts. The rule applies to

[23] SJVAPCD. Ozone Plans. http://www.valleyair.org/ Air_Quality_Plans/Ozone_Plans.htm, accessed April 23, 2024.
[24] SJVAPCD. 2016 Plan for the 2008 8-Hour Ozone Standard, http://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm, accessed April 23, 2024.
[25] SJVAPCD. Particulate Matter Plans. http://valleyair.org/Air_Quality_Plans/PM_Plans.htm, accessed April 23, 2024.

any applicant that seeks to gain a final discretionary approval for a development project, or any portion thereof, which upon full buildout would include any one of the following:

- 50 residential units.
- 2,000 square feet of commercial space.
- 25,000 square feet of light industrial space.
- 100,000 square feet of heavy industrial space.
- 20,000 square feet of medical office space.
- 39,000 square feet of general office space.
- 9,000 square feet of educational space.
- 10,000 square feet of government space.
- 20,000 square feet of recreational space.
- 9,000 square feet of space not identified above.
- Transportation/transit projects with construction exhaust emissions of two or more tons of NOx or two or more tons of PM_{10}.
- Residential projects on contiguous or adjacent property under common ownership of a single entity in whole or in part, that is designated and zoned for the same development density and land use, regardless of the number of tract maps, and has the capability of accommodating more than 50 residential units.
- Nonresidential projects on contiguous or adjacent property under common ownership of a single entity in whole or in part, that is designated and zoned for the same development density and land use, and has the capability of accommodating development projects that emit two or more tons per year of NOx or PM_{10} during project operations.

The rule requires all subject, nonexempt projects to mitigate both construction and operational period emissions by (1) applying feasible SJVAPCD-approved mitigation measures, or (2) paying any applicable fees to support programs that reduce emissions. Off-site emissions reduction fees (off-site fee) are required for projects that do not achieve the required emissions reductions through on-site emission reduction measures. Phased projects can defer payment of fees in accordance with an Off-site Emissions Reduction Fee Deferral Schedule (FDS) approved by the SJVAPCD.

To determine how an individual project would satisfy Rule 9510, each project would submit an air quality impact assessment (AIA) to the SJVAPCD as early as possible, but no later than prior to the project's final discretionary approval, to identify the project's baseline unmitigated emissions inventory for indirect sources: on-site exhaust emissions from construction activities and operational activities from mobile and area sources of emissions (excludes fugitive dust and permitted sources). Rule 9510 requires the following reductions, which are levels that the SJVAPCD has identified as necessary, based on their air quality management plans, to reach attainment for ozone and particulate matter:

Construction Equipment Emissions

The exhaust emissions for construction equipment greater than 50 horsepower (hp) used or associated with the development project shall be reduced by the following amounts from the statewide average as estimated by CARB:

- 20 percent of the total NOx emissions
- 45 percent of the total PM_{10} exhaust emissions

Mitigation measures may include those that reduce construction emissions on-site by using less polluting construction equipment, which can be achieved by utilizing add-on controls, cleaner fuels, or newer, lower emitting equipment.

Operational Emissions

- NOx Emissions. Applicants shall reduce 33.1 percent of the project's operational baseline NOx emissions over a period of 10 years as quantified in the approved AIA.
- PM_{10} Emissions. Applicants shall reduce of 50 percent of the project's operational baseline PM_{10} emissions over a period of 10 years as quantified in the approved AIA.

These requirements listed above can be met through any combination of on-site emission reduction measures. If a project cannot achieve the above standards through imposition of mitigation measures, then the project would be required to pay the applicable off-site fees. These fees are used to fund various incentive programs that cover the purchase of new equipment, engine retrofit, and education and outreach.

Fugitive PM_{10} Prohibitions

SJVAPCD controls fugitive PM_{10} through Regulation VIII, Fugitive PM_{10} Prohibitions. The purpose of this regulation is to reduce ambient concentrations of PM_{10} and $PM_{2.5}$ by requiring actions to prevent, reduce, or mitigate anthropogenic (human caused) fugitive dust emissions.

- Regulation VIII, Rule 8021 applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on-site, and travel on access roads to and from the site.
- Regulation VIII, Rule 8031 applies to the outdoor handling, storage, and transport of any bulk material.
- Regulation VIII, Rule 8041 applies to sites where carryout or trackout has occurred or may occur on paved roads or the paved shoulders of public roads.
- Regulation VIII, Rule 8051 applies to any open area having 0.5 acre or more within urban areas or 3.0 acres or more within rural areas, and contains at least 1,000 square feet of disturbed surface area.
- Regulation VIII, Rule 8061 applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.
- Regulation VIII, Rule 8071 applies to any unpaved vehicle/equipment traffic area.
- Regulation VIII, Rule 8081 applies to off-field agricultural sources.

Sources regulated are required to provide Dust Control Plans that meet the regulation requirements. Under Rule 8021, a Dust Control Plan is required for any residential project that will include 10 or more acres of disturbed surface area, a nonresidential project with 5 or more acres of disturbed surface area, or a project that relocates 2,500 cubic yards per day of bulk materials for at least three days. The Dust Control Plan is required to be submitted to SJVAPCD prior to the start of any construction activity. The

Dust Control Plan must also describe fugitive dust control measure to be implemented before, during, and after any dust-generating activity. For sites smaller than those listed above, the project is still required to notify SJVAPCD a minimum of 48 hours prior to commencing earthmoving activities.

National Emission Standards for Hazardous Air Pollutants

Rule 4002 applies in the event an existing building will be renovated, partially demolished, or removed (National Emission Standards for Hazardous Air Pollutants); this rule applies to all sources of Hazardous Air Pollutants.

Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

If asphalt paving will be used, then paving operations of the proposed Project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

Nuisance Odors

SJVAPCD controls nuisance odors through implementation of Rule 4102, Nuisance. Pursuant to this rule, "a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property."

Employer Based Trip Reduction Program

SJVAPCD has implemented Rule 9410, Employer Based Trip Reduction. The purpose of this rule is to reduce VMT from private vehicles used by employees to commute to and from their worksites to reduce emissions of NOx, ROG, and particulate matter (PM_{10} and $PM_{2.5}$). The rule applies to employers with at least 100 employees. Employers are required to implement an Employer Trip Reduction Implementation Plan (ETRIP) for each worksite with 100 or more eligible employees to meet applicable targets specified in the rule. Employers are required to facilitate the participation of the development of ETRIPs by providing information to its employees explaining the requirements and applicability of this rule. Employers are required to prepare and submit an ETRIP for each worksite to the District. The ETRIP must be updated annually. Under this rule, employers shall collect information on the modes of transportation used for each eligible employee's commutes both to and from work for every day of the commute verification period, as defined in using either the mandatory commute verification method or a representative survey method. Annual reporting includes the results of the commute verification for the previous calendar year along with the measures implemented as outlined in the ETRIP and, if necessary, any updates to the ETRIP.

3.1.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on the environment associated with air quality if it will:

- Conflict with or obstruct implementation of the applicable air quality plan;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

APPROACH TO ANALYSIS

Nearly all development projects within the San Joaquin Valley Air Basin, from general plans to individual development projects have the potential to generate air pollutants, making it more difficult to attain State and Federal ambient air quality standards. Therefore, it is necessary to evaluate air quality impacts to comply with CEQA. As identified in the SJVAPCD's *Guidance for Assessing and Mitigation Air Quality Impacts* (GAMAQI), land use decisions are critical to improving air quality within the San Joaquin Valley Air Basin because land use patterns greatly influence transportation needs and motor vehicle emissions are the largest source of air pollution. Land use decisions and project design elements such as preventing urban sprawl, encouraging mixed-use development, and project designs that reduce vehicle miles traveled (VMT) have proven benefit for air quality.

The analysis presented below was completed to include both a qualitative and a quantitative approach. The qualitative analysis discusses the proposed Project's consistency with the SJVAPCD's GAMAQI and other applicable rules and regulations. The quantitative analysis presents the proposed Project's VMT projections associated with buildout of the Tracy Housing Rezone Program and General Plan Amendment, which were developed using the Tracy Travel Demand Model, in comparison to the population and job projections associated with buildout of the Project. The VMT analysis is described in greater detail in Section 3.4, Transportation.

IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Project implementation would not conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of criteria pollutants (Less than Significant)

CEQA requires lead agencies to determine whether a Project is consistent with all applicable air quality plans. The SJVAPCD's most current air quality plans for PM, ozone, and carbon monoxide are (respectively) the *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards*, the *2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard*, and the *2004 Revisions to the Carbon Monoxide Maintenance Plan*. These plans are also known is "Air Quality Attainment Plans". The SJVAPCD's Air Quality Attainment Plans include measures to promote air quality elements in county and city general plans as one of the primary indirect source programs. For example, the *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards plan* identifies that 5% annual reduction in $PM_{2.5}$ is required annually. Separately, the *2020 Reasonably Available Control Technology (RACT) Demonstration for the 2015 8-Hour Ozone Standard* plan describes a variety of U.S. Environmental Protection Agency (EPA) control technique guidelines to limit volatile organic compounds, including specification requirements for vapor control systems at gasoline service stations, cutback asphalt, and solvent metal cleaning.

Consistency with these measures is typically determined based on individual projects' consistency with the criteria pollutant and other air quality thresholds as promulgated by the SJVAPCD.

The San Joaquin Valley is in State-level non-attainment for ozone, PM_{10}, and $PM_{2.5}$. The SJVAPCD does not provide criteria pollutant thresholds for Plan-level documents (such as the proposed Project). Thresholds of significance for criteria pollutants are established at the project-level by the SJVAPCD. As such, there is no programmatic threshold of significance established for criteria pollutants for which to compare the proposed Project.

The rezones identified in the Housing Element associated with the proposed Project total approximately 239 acres and would accommodate 6,588 units, and an associated population increase of approximately 21,345 persons. This new growth will undoubtedly result in increases in the emissions of criteria pollutants, most notably from mobile-source and area-source emissions increases associated with increased growth and development in Tracy. Additionally, the implementation of individual projects associated with the proposed Project would have the potential to conflict with the SJVAPCD's thresholds of significance for criteria pollutants at the project-level.

The existing General Plan includes numerous policies that would further the fundamental goals of the SJVAPCD in reducing emissions of criteria pollutants associated with vehicle miles traveled, reducing building energy usage, and increasing usage of renewable forms of energy. For example, Air Quality Element Policy AQ-1.1-P1 promotes land use patterns the reduce the number and length of motor vehicle trips. Policy AQ-1.1-P2 encourages the City to maintain a balance and match between jobs and housing. Policy AQ-1.2-P4 encourages developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Further, Policy AQ-1.2-P5 encourages the usage of solar water and pool heaters. Additionally, Policy AQ-1.2-P6 encourages the installation of solar voltaic panels on new homes and businesses.

The policies and actions included throughout the existing General Plan cover the full breadth of air quality issues as recommended in the applicable air quality plans. If approval of the proposed Project would cause the disruption, delay, or otherwise hinder the implementation of any air quality plan control measure, it may be inconsistent with the applicable air quality plans. The proposed Project does not cause the disruption, delay, or otherwise hinder the implementation of any quality plan control measure; therefore, it is consistent with the applicable air quality plans. All future projects consistent with the proposed Project within the Planning Area would be subject to all applicable General Plan goals, policies, and actions (included those policies cited above), which were adopted to reduce emissions and air quality impacts. However, the proposed Project includes higher levels and rates of growth than those that would be facilitated under the existing General Plan. As such, total emissions levels associated with Project buildout would increase, which may indirectly hinder the SJVAPCDs efforts to reduce total emissions of criteria pollutants.

Implementation of the proposed Project, which is consistent with all federal and state guidelines, would be consistent with the applicable air quality plans, but would still lead to overall increases in emissions of criteria pollutants compared to existing conditions, given the total growth projected upon full buildout of the General Plan.

The following quantitative analysis describes VMT per capita and VMT per employee, for both the 2046 No Build and 2046 Build scenarios. As part of the transportation analysis, Kimley Horn (the traffic consultant) modeled VMT for the Planning Area for air quality analysis purposes. As described by the transportation analysis, and as described in greater detail in Section 3.4, Transportation, the 2046 No Build scenario resulted in a VMT per capita of 17.5 and a VMT per employee of 13.0. The 2046 Buildout scenario resulted in a VMT per capita of 15.3 and VMT per employee of 13.4. Notably, the VMT per capita value is reduced by 2.2 VMT per capita between the 2046 No Build and the 2046 Buildout scenarios for residential uses. In addition, the VMT per employee value is increased by 0.4 VMT per employee between the 2046 No Build and 2046 Buildout scenarios for employment uses. As such the Project yields lower VMT overall for the Build scenario compared to the No Build scenario. These results are summarized in **Table 3.1-6**.

TABLE 3.1-6: VEHICLE MILES TRAVELED (VMT)

JURISDICTION	*2046 NO BUILD*		*2046 BUILDOUT*	
	VMT/CAPITA	*VMT/EMPLOYEE*	*VMT/CAPITA*	*VMT/EMPLOYEE*
Tracy SOI	17.5	13.0	15.3	13.4

SOURCE: KIMLEY HORN, 2025

As shown in the table above, implementation of the proposed Project would result in a reduction in VMT per capita and a slight increase in VMT per employee. This is largely due to an emphasis on infill development and increases in overall residential density within Tracy.

As previously stated, the existing General Plan includes numerous goals, policies and implementation actions which would further the fundamental goals of the SJVAPCD in reducing emissions of criteria pollutants. Since the proposed Project's VMT would increase at a rate slower rate than the increase in jobs and population growth, this impact is considered ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.1-2: Project implementation would not expose sensitive receptors to substantial pollutant concentrations (Less than Significant)

The SJVAPCD has identified local community risks from air pollutants to include exposure to TACs and $PM_{2.5}$ concentrations. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health and $PM_{2.5}$ can cause a wide range of health effects (e.g., aggravating asthma and bronchitis, causing visits to the hospital for respiratory and cardiovascular systems, and contributing to heart attacks and deaths). Common stationary source types of TAC and $PM_{2.5}$ emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to SJVAPCD permit requirements. The other, often more significant, common source type is on-road motor vehicles on freeways and roads such as trucks and cars, and off-road sources such as construction equipment, ships, and trains. Implementation of the existing General Plan would have the potential of introducing new sources of TAC

and $PM_{2.5}$ emissions within the city as well as siting new sensitive receptors, such as new homes in close proximity to existing sources of TAC and $PM_{2.5}$ emissions.

Health risks associated with TACs are most pronounced in the areas adjacent to freeway segments. Regardless of the existing health risks associated with TACs, the SJVAPCD CEQA Guidelines provide recommendations for all communities to ensure reduced health risks associated with TACs. The existing General Plan includes policies that are intended to minimize exposure of TACs to sensitive receptors (see below).

The *Air Quality and Land Use Handbook: A Community Health Perspective*, adopted by CARB, May 2005 was prepared to address the siting of sensitive land uses in close proximity to sources of TAC emissions that include the following sources within the City:

- Within 500 feet of Interstate 5 and Highway 120;
- Within 300 feet of dry cleaning operations that use perchloroethylene; and
- Within 50 feet of a typical gas station.

The existing General Plan includes policies aimed to limit exposure to TAC and PM concentrations within the city. For example, Air Quality Element Policy AQ-1.1-P1 requires the City to promote land use patterns that reduce the number and length of motor vehicle trips. Additionally, Policy AQ-1.2-P3 requires developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Policy AQ-1.2-P6 encourages installation of solar voltaic panels on new homes and businesses shall be encouraged. Policy AQ-1.2-P9 requires new developments to follow the current requirements of the SJVAPCD with respect to wood burning fireplaces and heaters. Policy AQ-1.2-P10 requires stationary air pollutant emission sources (e.g. factories) to be located an appropriate distance away and down-wind from residential areas and other sensitive receptors. Furthermore, crucially, Policy AQ-1.2-P12 requires new sources of toxic air pollutants to prepare a Health Risk Assessment as required under the Air Toxics “Hot Spots” Act and, based on the results of the Assessment, to establish appropriate land use buffer zones around those areas posing substantial health risks.

Individual projects will be required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. In the event that future individual projects may result in exposure to TACs by sensitive receptors, these future projects would be required to implement mitigation measures to reduce the impact to a less than significant level, consistent with SJVAPCD requirements.

In addition, it should also be noted that the Omnibus Low-NOx Rule was approved by CARB August 28, 2020, which will require heavy-duty truck engine NOx emissions to be cut to approximately 75% below current standards beginning in 2024, and 90% below current standards in 2027. The rule also places nine additional regulatory requirements on new heavy-duty truck and engines. Those additional requirements include a 50% reduction in particulate matter emissions, stringent new low-load and idle standards, a new in-use testing protocol, extended deterioration requirements, a new California-only credit program, and extended mandatory warranty requirements.

Compliance with the applicable policies and programs in the existing General Plan as well the applicable CARB and SJVAPCD rules and regulations, would minimize the potential exposure of sensitive receptors to substantial concentrations of TACs and $PM_{2.5}$ within the city. Therefore, impacts associated with the potential for the proposed Project to expose sensitive receptors to substantial pollutant concentrations would be considered to be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.1-3: Project implementation would not result in other emissions such as those leading to odors adversely affecting a substantial number of people (Less than Significant)

Objectionable odors can be generated from certain types of commercial and/or industrial land uses. Common sources of odors include wastewater treatment plants, landfills, composting facilities, refineries, and chemical plants. In general, residential land uses are not associated with odor generation, but they do serve as sensitive receptors. Odors rarely have direct health impacts, but they can be very unpleasant and can lead to anger and concern over possible health effects among the public.

With respect to other emissions, future development under the proposed Project would be required to comply with all applicable SJVAPCD rules and regulations, and General Plan policies and actions. The proposed projects that could generate odor impacts on sensitive receptors are required to undergo an analysis consistent with the SJVAPCD's GAMAQI.

The proposed Project does not propose any specific development projects, but does identify areas for residential development. It is not anticipated that such land uses would generate notable odors, since residential uses are not typically known to generate substantial odors. Individual projects that have the potential to generate significant objectionable odors would be required to undergo individual CEQA review.

In addition, the existing General Plan includes policies that would limit exposure to TAC and PM concentrations within the city. For example, Air Quality Element Policy AQ-1.1-P1 requires the City to promote land use patterns that reduce the number and length of motor vehicle trips. Additionally, Policy AQ-1.2-P3 requires developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Policy AQ-1.2-P6 encourages installation of solar voltaic panels on new homes and businesses shall be encouraged. Policy AQ-1.2-P9 requires new developments to follow the current requirements of the SJVAPCD with respect to wood burning fireplaces and heaters. Policy AQ-1.2-P10 requires stationary air pollutant emission sources (e.g. factories) to be located an appropriate distance away and down-wind from residential areas

and other sensitive receptors. Therefore, implementation of the proposed Project would have a ***less-than-significant impact*** relative to this topic.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

CUMULATIVE IMPACTS

Air quality issues have the potential to affect the entire air basin. Therefore, cumulative setting for air quality impacts is the San Joaquin Valley Air Basin (SJVAB). The SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Tulare, Madera, Merced, San Joaquin, and Stanislaus. Air pollution from significant activities in the SJVAB includes a variety of industrial-based sources as well as on- and off-road mobile sources. These sources, coupled with geographical and meteorological conditions unique to the area, stimulate the formation of unhealthy air.

Impact 3.1-4: Implementation of the proposed Project, in combination with other cumulative development, would not conflict with or obstruct implementation of the applicable air quality plan, or result in a cumulatively considerable net increase of criteria pollutants (Less than Significant)

Under buildout conditions in San Joaquin County, the SJVAB would continue to experience increases in criteria pollutants and efforts to improve air quality throughout the basin would be hindered. The San Joaquin Valley is in State-level non-attainment for ozone, PM_{10}, and $PM_{2.5}$. The SJVAPCD does not provide criteria pollutant thresholds for Plan-level documents (such as the proposed Project). Thresholds of significance for criteria pollutants are established at the project-level by the SJVAPCD. Because cumulative development in the SJVAB would continue, thereby increasing cumulative emissions for criteria pollutants, the cumulative impact would be potentially significant.

The Tracy General Plan includes numerous policies that would further the fundamental goals of the SJVAPCD in reducing emissions of criteria pollutants associated with vehicle miles traveled, reducing building energy usage, and increasing usage of renewable forms of energy. For example, Air Quality Element Policy AQ-1.1-P1 promotes land use patterns the reduce the number and length of motor vehicle trips. Policy AQ-1.1-P2 encourages the City to maintain a balance and match between jobs and housing. Policy AQ-1.2-P4 encourages developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Further, Policy AQ-1.2-P5 encourages the usage of solar water and pool heaters. Additionally, Policy AQ-1.2-P6 encourages the installation of solar voltaic panels on new homes and businesses.

The policies and actions included throughout the existing General Plan cover the full breadth of air quality issues as recommended in the applicable air quality plans. If approval of the proposed Project would cause the disruption, delay, or otherwise hinder the implementation of any air quality plan control measure, it

may be inconsistent with the applicable air quality plans. The proposed Project does not cause the disruption, delay, or otherwise hinder the implementation of any quality plan control measure; therefore, it is consistent with the applicable air quality plans. All future development and infrastructure projects within the Planning Area would be subject to all applicable General Plan goals, policies, and actions (included those policies cited above), which were adopted to reduce emissions and air quality impacts. However, the proposed Project includes higher levels and rates of growth than those that would be facilitated under the existing General Plan. As such, total emissions levels associated with Project buildout would increase, which may indirectly hinder the SJVAPCDs efforts to reduce total emissions of criteria pollutants.

Implementation of the proposed Project, which is consistent with all federal and state guidelines, would be consistent with the applicable air quality plans, but would still lead to overall increases in emissions of criteria pollutants compared to existing conditions, given the total growth projected upon full buildout of the proposed Project.

Additionally, as shown Table 3.1-6, implementation of the proposed Project would result in an overall reduction in VMT per capita and only a slight increase VMT per employee. This is largely due to an emphasis on infill development and increases in overall residential density within Tracy.

As previously stated, the existing General Plan includes numerous goals, policies and implementation actions which would further the fundamental goals of the SJVAPCD in reducing emissions of criteria pollutants. Since the proposed Project's VMT would increase at a rate slower rate than the increase in jobs and population growth, the proposed Project would not have a considerable contribution to this impact, and the cumulative impact would be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.1-5: Implementation of the proposed Project, in combination with other cumulative development, would not expose sensitive receptors to substantial pollutant concentrations (Less than Significant)

The SJVAPCD has identified local community risks from air pollutants to include exposure to TACs and $PM_{2.5}$ concentrations. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health and $PM_{2.5}$ can cause a wide range of health effects (e.g., aggravating asthma and bronchitis, causing visits to the hospital for respiratory and cardiovascular systems, and contributing to heart attacks and deaths). Common stationary source types of TAC and $PM_{2.5}$ emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to SJVAPCD permit requirements. The other, often more significant, common source type is on-road motor vehicles on freeways and roads such as trucks and cars, and off-road sources such as construction equipment, ships, and trains.

Implementation of the proposed Project would have the potential of introducing new sources of TAC and $PM_{2.5}$ emissions within the city as well as siting new sensitive receptors, such as new homes in close proximity to existing sources of TAC and $PM_{2.5}$ emissions. Therefore, the cumulative impact of exposing sensitive receptors to substantial pollutant concentrations would be potentially significant.

Health risks associated with TACs are most pronounced in the areas adjacent to freeway segments. Regardless of the existing health risks associated with TACs, the SJVAPCD CEQA Guidelines provide recommendations for all communities to ensure reduced health risks associated with TACs. The proposed Project includes policies that are intended to minimize exposure of TACs to sensitive receptors (see below).

The existing General Plan includes policies aimed to limit exposure to TAC and PM concentrations within the city. For example, Air Quality Element Policy AQ-1.1-P1 requires the City to promote land use patterns that reduce the number and length of motor vehicle trips. Additionally, Policy AQ-1.2-P3 requires developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Policy AQ-1.2-P6 encourages installation of solar voltaic panels on new homes and businesses shall be encouraged. Policy AQ-1.2-P9 requires new developments to follow the current requirements of the SJVAPCD with respect to wood burning fireplaces and heaters. Policy AQ-1.2-P10 requires stationary air pollutant emission sources (e.g. factories) to be located an appropriate distance away and down-wind from residential areas and other sensitive receptors. Furthermore, crucially, Policy AQ-1.2-P12 requires new sources of toxic air pollutants to prepare a Health Risk Assessment as required under the Air Toxics “Hot Spots” Act and, based on the results of the Assessment, to establish appropriate land use buffer zones around those areas posing substantial health risks.

Individual projects will be required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. In the event that future individual projects may result in exposure to TACs by sensitive receptors, these future projects would be required to implement mitigation measures to reduce the impact to a less than significant level, consistent with SJVAPCD requirements.

In addition, it should also be noted that the Omnibus Low-NOx Rule was approved by CARB August 28, 2020, which will require heavy-duty truck engine NOx emissions to be cut to approximately 75% below current standards beginning in 2024, and 90% below current standards in 2027. The rule also places nine additional regulatory requirements on new heavy-duty truck and engines. Those additional requirements include a 50% reduction in particulate matter emissions, stringent new low-load and idle standards, a new in-use testing protocol, extended deterioration requirements, a new California-only credit program, and extended mandatory warranty requirements.

Compliance with the applicable policies and programs in the proposed Project as well the applicable CARB and SJVAPCD rules and regulations, would minimize the potential exposure of sensitive receptors to substantial concentrations of TACs and $PM_{2.5}$ within the city, and the Project would not make a considerable contribution to the cumulative impact. Therefore, cumulative impacts associated with the

potential to expose sensitive receptors to substantial pollutant concentrations would be considered to be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.1-6: Implementation of the proposed Project, in combination with other cumulative development, would not result in other emissions such as those leading to odors adversely affecting a substantial number of people (Less than Significant)

Objectionable odors can be generated from certain types of commercial and/or industrial land uses. Common sources of odors include wastewater treatment plants, landfills, composting facilities, refineries, and chemical plants. In general, residential land uses are not associated with odor generation, but they do serve as sensitive receptors. Odors rarely have direct health impacts, but they can be very unpleasant and can lead to anger and concern over possible health effects among the public.

Cumulative land use patterns typically site potentially odorous uses away from sensitive receptors. Odors typically are localized impacts, but can be caused by both stationary and mobile emissions. For example, the Tracy General Plan includes policies that would limit exposure to TAC and PM concentrations within the city. For example, Air Quality Element Policy AQ-1.1-P1 requires the City to promote land use patterns that reduce the number and length of motor vehicle trips. Additionally, Policy AQ-1.2-P3 requires developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Policy AQ-1.2-P6 encourages installation of solar voltaic panels on new homes and businesses shall be encouraged. Policy AQ-1.2-P9 requires new developments to follow the current requirements of the SJVAPCD with respect to wood burning fireplaces and heaters. Policy AQ-1.2-P10 requires stationary air pollutant emission sources (e.g. factories) to be located an appropriate distance away and down-wind from residential areas and other sensitive receptors. Therefore, the potential for exposing a substantial number of people to odors caused by air emissions would be low, and the cumulative impact would be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

This section discusses regional greenhouse gas (GHG) emissions, climate change, and energy conservation impacts that could result from Project implementation. The analysis contained in this section is intended to be at a Project level, and covers impacts associated with the conversion of the entire site to urban uses. This section provides a background discussion of greenhouse gases and climate change linkages and effects of global climate change. This section is organized with an existing setting, regulatory setting, approach/methodology, and impact analysis. The analysis and discussion of the GHG, climate change, and energy conservation impacts in this section focuses on the proposed Project's consistency with local, regional, and statewide climate change planning efforts and discusses the context of these planning efforts as they relate to the proposed Project. Disclosure and discussion of the Project's estimated energy usage and greenhouse gas emissions are provided.

Two comments were received during the public review period or scoping meeting for the Notice of Preparation regarding this topic: one from the California Air Resources Board (CARB), and another from the San Joaquin Air Pollution Control District (SJVAPCD). The commentor from the CARB recommends that the CEQA evaluation include a robust discussion of how the Project will promote consistency with the recommendations of Appendix D of the CARB's Scoping Plan. Separately, the SJVAPCD comment letter recommends that the proposed Project be analyzed in accordance with the District's Guidance for Assessing and Mitigating Air Quality Impacts, and provides other recommendations for how to analyze the Project as part of the EIR, as well as a list of potential Air District rules and regulations that may be applicable to the proposed Project. These comment letters are addressed within this section. The full comments are included in Appendix A.

3.2.1 ENVIRONMENTAL SETTING

GREENHOUSE GASES AND CLIMATE CHANGE LINKAGES

Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2019, concentrations of these three GHGs have increased globally by 47, 156, and 23 percent, respectively.[1]

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs

[1] Intergovernmental Panel on Climate Change (IPCC). 2023. Climate Change 2023 Synthesis Report. Available: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf

contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial and electricity generation sectors.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced 369 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2021.[2]

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2021, accounting for 39% of total GHG emissions in the State. This category was followed by the industrial sector (22%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture and forestry sector (8%), the residential energy consumption sector (8%), and the commercial energy consumption sector (6%).[3]

EFFECTS OF GLOBAL CLIMATE CHANGE

The effects of increasing global temperature are far-reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs are anticipated to result in rising sea levels, which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the State. The snowpack portion of the supply could potentially decline by 50% to 75% by the end of the 21st century.[4] This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the State; however, since this

[2] California Air Resources Boad. 2024. 2000-2021 GHG Inventory (2023 Edition). Available: https://ww2.arb.ca.gov/ghg-inventory-data

[3] California Air Resources Boad. 2024. 2000-2021 GHG Inventory (2023 Edition). Available: https://ww2.arb.ca.gov/ghg-inventory-data.

[4] National Resources Defense Council (NRDC). 2014. NRDC Fact Sheet: California Snowpack and the Drought. April 2014. Available at: https://www.nrdc.org/sites/default/files/ca-snowpack-and-drought-FS.pdf

would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more pressure on California's levee/flood control system.

Sea level has risen approximately seven inches during the last century and it is predicted to rise an additional 22 to 35 inches by 2100, depending on the future GHG emissions levels.[5] If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands. As the existing climate throughout California changes over time, mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, could also result. Under the emissions scenarios of the Climate Scenarios report, the impacts of global warming in California are anticipated to include, but are not limited to, the following:[6]

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase from 25% to 35% under the lower warming range and to 75% to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures will increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts capture and transport water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater would degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major State fresh water supply. Global warming is also projected to seriously affect

[5] California Environmental Protection Agency. 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature. December 2010. Available: http://www.climatechange.ca.gov/climate_action_team/reports/

[6] California Environmental Protection Agency. 2010. Climate Action Team Report to Governor Schwarzenegger and the Legislature. December 2010. Available: http://www.climatechange.ca.gov/climate_action_team/reports/.

agricultural areas, with California farmers projected to lose as much as 25% of the water supply they need; decrease the potential for hydropower production within the State (although the effects on hydropower are uncertain); and seriously harm winter tourism. Under the lower warming range, the snow dependent winter recreational season at lower elevations could be reduced by as much as one month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing, snowboarding, and other snow dependent recreational activities.

If GHG emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snow pack by as much as 70% to 90%. Under the lower warming scenario, snowpack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snowpack will be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack would pose challenges to water managers, hamper hydropower generation, and nearly eliminate all skiing and other snow-related recreational activities.

Agriculture

Increased GHG emissions are expected to cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. Although higher carbon dioxide levels can stimulate plant production and increase plant water-use efficiency, California's farmers will face greater water demand for crops and a less reliable water supply as temperatures rise.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures are likely to worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts, and milk.

Crop growth and development will be affected, as will the intensity and frequency of pest and disease outbreaks. Rising temperatures will likely aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

In addition, continued global warming will likely shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Should range contractions occur, it is likely that new or different weed species will fill the emerging gaps. Continued global warming is also likely to alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global warming is expected to alter the distribution and character of natural vegetation thereby resulting in a possible increased risk of large wildfires. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation

conditions, future risks will not be uniform throughout the State. For example, if precipitation increases as temperatures rise, wildfires in southern California are expected to increase by approximately 30% toward the end of the century. In contrast, precipitation decreases could increase wildfires in northern California by up to 90%.

Moreover, continued global warming will alter natural ecosystems and biological diversity within the State. For example, alpine and sub-alpine ecosystems are expected to decline by as much as 60% to 80% by the end of the century as a result of increasing temperatures. The productivity of the State's forests is also expected to decrease as a result of global warming.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten the State's coastal regions. Under the higher warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

ENERGY CONSUMPTION

Energy in California is consumed from a wide variety of sources. Fossil fuels (including gasoline and diesel fuel, natural gas, and energy used to generate electricity) are the most widely used form of energy in the State. However, renewable sources of energy (such as solar and wind) are growing in proportion to California's overall energy mix. A large driver of renewable sources of energy in California is the State's current Renewable Portfolio Standard (RPS), which requires the State to derive at least 60 percent of electricity generated by 2030, and to achieve zero-carbon emissions by 2045 (as passed in September 2018, under SB 100). The 2021 SB 100 Joint Agency Report was published in 2021, which found that the long-term goals contained in SB 100 are technically achievable through multiple pathways, although achieving 100 clean electricity would increase the total annual electricity system cost by 6% relative to the cost under the state's Renewables Portfolio Standard requirement of having at least 60 percent clean electricity by the end of 2030. These estimates will change over time as markets change, new technologies are commercialized, and additional factors such as grid reliability are included in future analyses.

Overall, in 2022, California's per capita energy usage was ranked fourth-lowest in the nation.[7] California's per capita rate of energy usage has remained relatively constant since the 1970's. Many State regulations since the 1970s, including new building energy efficiency standards, vehicle fleet efficiency measures, as well as growing public awareness, have helped to keep per capita energy usage in the State in check.

The consumption of non-renewable energy (i.e. fossil fuels) associated with the operation of passenger, public transit, and commercial vehicles results in GHG emissions that contribute to global climate change. Alternative fuels such as natural gas, ethanol, and electricity (unless derived from solar, wind, nuclear, or other energy sources that do not produce carbon emissions) also result in GHG emissions and contribute to global climate change.

[7] United States Energy Information Administration (U.S. EIA). 2024. California State Energy Profile. Last updated May 16, 2024. Available at: https://www.eia.gov/state/print.php?sid=CA

Electricity Consumption

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. In 2016, more than one-fourth of the electricity supply comes from facilities outside of the State. Much of the power delivered to California from states in the Pacific Northwest was generated by wind. States in the Southwest delivered power generated at coal-fired power plants, at natural gas-fired power plants, and from nuclear generating stations.[8] In 2022, approximately 42 percent of California's utility-scale net electricity generation was fueled by natural gas. In addition, about 42 percent of the State's utility-scale net electricity generation came from non-hydroelectric renewable technologies, such as solar, wind, geothermal, and biomass. Another 8 percent of the State's utility-scale net electricity generation came from hydroelectric generation, and nuclear energy powered an additional 88 percent. The amount of electricity generated from coal is negligible.[9] The percentage of renewable resources as a proportion of California's overall energy portfolio is increasing over time, as directed by the State's Renewable Portfolio Standard (RPS).

According to the California Energy Commission (CEC), total statewide electricity consumption increased from 166,979 gigawatt-hours (GWh) in 1980 to 228,038 GWh in 1990, which is an estimated annual growth rate of 3.66 percent. The statewide electricity consumption in 1997 was 246,225 GWh, reflecting an annual growth rate of 1.14 percent between 1990 and 1997 (U.S. EIA, 2020b). Statewide consumption was 274,985 GWh in 2010, an annual growth rate of 0.9 percent between 1997 and 2010.

PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.

PG&E's, electricity is generated from a combination of traditional sources, such as coal-fired plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or "solar farms." "The grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants to the PG&E system. The distribution system, comprising lower-voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to individual customers.

In addition to its base plan, PG&E has three plan options, known as Solar Choice options and Green Saver, which give customers the option of purchasing energy from solar resources. The first Solar Choice option provides up to 50 percent of a customer's energy from solar resources, while the other option provides up to 100 percent of a customer's energy from solar resources, and the Green Saver option provides up to 90 percent of a customer's energy from solar resources.

[8] United States Energy Information Administration (U.S. EIA). 2024. California State Energy Profile. Last updated May 16, 2024. Available at: https://www.eia.gov/state/print.php?sid=CA.
[9] United States Energy Information Administration (U.S. EIA). 2024. California State Energy Profile. Last updated May 16, 2024. Available at: https://www.eia.gov/state/print.php?sid=CA.

Table 3.2-1 outlines PG&E's power mix in 2021, compared to the power mix for the state. The table identifies the renewable and non-renewable energy sources for PG&E. It should be noted that some GHG free sources are not considered renewable (e.g., nuclear is GHG free but not renewable).

TABLE 3.2-1. PG&E AND THE STATE OF CALIFORNIA POWER MIX IN 2022

ENERGY RESOURCES	PG&E OPTION: BASE	PG&E OPTION: 50% SOLAR CHOICE	PG&E OPTION: 100% SOLAR	PG&E OPTION: GREEN SAVER	CALIFORNIA POWER MIX 2021
Eligible Renewable	38.%	67.2%	96.2%	100.0%	35.8%
Biomass and waste	4.6%	2.3%	0.0%	0.0%	2.1%
Geothermal	0.5%	0.3%	0.0%	0.0%	4.7%
Small hydroelectric	1.8%	0.9%	0.0%	0.0%	1.1%
Solar	22.0%	59.0%	96.2%	100.0%	17.0%
Wind	9.4%	4.7%	0.0%	0.0%	10.8%
Coal	0.0%	0.0%	0.0%	0.0%	2.1%
Large Hydroelectric	7.6%	3.8%	0.0%	0.0%	9.2%
Natural Gas	4.8%	4.3%	0.0%	0.0%	36.4%
Nuclear	49.3%	24.6%	0.0%	0.0%	9.2%
Other	0.0%	0.0%	0.0%	0.0%	0.1%
Unspecified	0.0%	0.0%	3.8%	0%	7.1%

NOTE: [A.] ELECTRICITY FROM TRANSACTIONS THAT ARE NOT TRACEABLE TO SPECIFIC GENERATION SOURCES ARE CLASSIFIED AS UNSPECIFIED SOURCES OF POWER.

SOURCE: PG&E. 2022. 2022 POWER CONTENT LABEL. AVAILABLE: HTTPS://WWW.PGE.COM/ASSETS/PGE/DOCS/ACCOUNT/BILLING-AND-ASSISTANCE/BILL-INSERTS/1023-POWER-CONTENT-LABEL.PDF. ACCESSED: AUGUST 26, 2023.

In 2021, electricity consumption in San Joaquin County was approximately 5,771 million kWh. Of that, residential consumption accounted for approximately 2,091 million kWh.[10]

Oil

The primary energy source for the United States is oil, which is refined to produce fuels like gasoline, diesel, and jet fuel. Oil is a finite, nonrenewable energy source. World consumption of petroleum products has grown steadily in the last several decades. As of 2016, world consumption of oil had reached 96 million barrels per day. The United States, with approximately five percent of the world's population, accounts for approximately 19 percent of world oil consumption, or approximately 18.6 million barrels per day (U.S. EIA, 2023c). The transportation sector relies heavily on oil. In California, petroleum-based fuels currently provide approximately 96 percent of the State's transportation energy needs.

[10] California Energy Commission. 2024. Electricity Consumption by County. Available: https://ecdms.energy.ca.gov/elecbycounty.aspx

Natural Gas/Propane

The State produces approximately 12 percent of its natural gas, while obtaining 22 percent from Canada and 65 percent from the Rockies and the Southwest.[11] In 2006, California produced 325.6 billion cubic feet of natural gas.[12]

PG&E provides natural gas for residential, industrial, and agency consumers within the San Joaquin County area. PG&E's natural gas (i.e., methane) delivery system includes 42,000 miles of natural gas distribution pipelines and 6,700 miles of transmission pipelines. PG&E's gas transmission system serves approximately 15 million energy customers in California. The system is operated under an inspection and monitoring program in real time on a 24-hour basis, with leak inspections, surveys, and patrols continuously taking place along the pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from the fields and storage facilities. The smaller distribution pipelines deliver gas to individual businesses or residences.

In 2022, natural gas consumption in San Joaquin County was approximately 187 million therms.[13] Residential natural gas consumption accounted for approximately 90 million therms.

3.2.2 REGULATORY SETTING

FEDERAL

Clean Air Act

The Federal Clean Air Act (FCAA) was first signed into law in 1970. In 1977, and again in 1990, the law was substantially amended. The FCAA is the foundation for a national air pollution control effort, and it is composed of the following basic elements: National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, hazardous air pollutant standards, State attainment plans, NAAQS motor vehicle emissions standards, stationary source emissions standards and permits, acid rain control measures, stratospheric ozone protection, and enforcement provisions.

The EPA is responsible for administering the FCAA. The FCAA requires the EPA to set NAAQS for several problem air pollutants based on human health and welfare criteria. Two types of NAAQS were established: primary standards, which protect public health, and secondary standards, which protect the public welfare from non-health-related adverse effects such as visibility reduction.

In 2007, in the court case of *Massachusetts et al. vs. the USEPA et al*. (549 U.S. 497), the U.S. Supreme Court found that GHGs are air pollutants covered by the federal Clean Air Act (42 USC Sections 7401-7671q). The Supreme Court held that the Administrator of the United States Environmental Protection

[11] California Energy Commission. 2024. Supply and Demand of Natural Gas in California. Available: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california

[12] California Energy Commission. 2024. Supply and Demand of Natural Gas in California. Available: https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california.

[13] California Energy Commission. 2024. Gas Consumption by County. Available: https://ecdms.energy.ca.gov/gasbycounty.aspx

Agency must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the Administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action was a prerequisite for implementing GHG emission standards for vehicles. In collaboration with the National Highway Traffic Safety Administration (NHTSA) and CARB, the USEPA developed emission standards for light-duty vehicles (2012-2025 model years), and heavy-duty vehicles (2014-2027 model years).

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards.

Since 1990, the fuel economy standard for new passenger cars has been 27.5 mpg. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is determined on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S. The Corporate Average Fuel Economy (CAFE) program, which is administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Federal Climate Change Policy

According to the U.S. EPA, "the United States government has established a comprehensive policy to address climate change" that includes slowing the growth of emissions; strengthening science, technology, and institutions; and enhancing international cooperation. To implement this policy, "the Federal government is using voluntary and incentive-based programs to reduce emissions and has

established programs to promote climate technology and science." The U.S. EPA administers multiple programs that encourage voluntary GHG reductions, including "ENERGY STAR," "Climate Leaders," and Methane Voluntary Programs.

The following are actions taken at the federal level relating to GHG emissions.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the U.S. EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light duty trucks, and medium duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second phase joint rulemaking, establishing national standards for light duty vehicles for model years 2017 through 2025 in August 2012.[14] The new standards for model years 2017 through 2025 apply to passenger cars, light duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The U.S. EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies adopted engine and vehicle standards that began in the 2014 model year and achieve up to a 20 percent reduction in CO2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies adopted separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles, and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Finally, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the U.S. EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers

[14] United States Environmental Protection Agency (EPA). EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. Website: https://www.attorneygeneral.gov/wp-content/uploads/2018/01/CAFE_2017-25_Fact_Sheet.pdf. Accessed August 26, 2024.

in the United States and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the U.S. EPA.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec. Currently only California and Quebec are participating in the cap-and-trade program.

STATE

The California Legislature has enacted a series of statutes in recent years addressing the need to reduce GHG emissions across the State. These statutes can be categorized into four broad categories: (i) statutes setting numerical statewide targets for GHG reductions, and authorizing CARB to enact regulations to achieve such targets; (ii) statutes setting separate targets for increasing the use of renewable energy for the generation of electricity throughout the State; (iii) statutes addressing the carbon intensity of vehicle fuels, which prompted the adoption of regulations by CARB; and (iv) statutes intended to facilitate land use planning consistent with statewide climate objectives. The discussion below will address each of these key sets of statutes, as well as CARB "Scoping Plans" intended to achieve GHG reductions under the first set of statutes and recent building code requirements intended to reduce energy consumption.

Statutes Setting Statewide GHG Reduction Targets

ASSEMBLY BILL 32 (GLOBAL WARMING SOLUTIONS ACT)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006 (Health & Safety Code Section 38500 et seq.), also known as Assembly Bill (AB) 32 (Stats. 2006, ch. 488). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was accomplished through an enforceable statewide cap on GHG emissions that was phased in starting in 2012. To effectively implement the cap, AB 32 directed the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

SENATE BILL 32

SB 32 (Stats. 2016, ch. 249) added Section 38566 to the Health and Safety Code. It provides that "[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by [Division 25.5 of the Health and Safety Code], [CARB] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the

statewide greenhouse gas emissions limit no later than December 31, 2030." In other words, SB 32 requires California, by 2030, to reduce its statewide GHG emissions so that they are 40 percent below those that occurred in 1990.

Statutes Setting Target for the Use of Renewable Energy for the Generation of Electricity

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

Senate Bill X1-2 (Stats. 2011, 1st Ex. Sess., ch. 1) set more aggressive statutory targets for renewable electricity, culminating in the requirement that 33 percent of the State's electricity come from renewables by 2020. This legislation applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities were required to meet renewable energy goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and 33 percent by the end of 2020. (See Pub. Utility Code, Section 399.11 et seq. [subsequently amended].) SB 350, discussed below, increases the Renewable Portfolio Standard to require 50 percent of electricity generated to be from renewables by 2030. (Pub. Utility Code, Section 399.11, subd (a); see also Section 399.30, subd. (c)(2).) In 2018, Senate Bill 100 (Stats. 2018, ch. 312) revised the above-described deadlines and targets so that the State will have to achieve a 50% renewable resources target by December 31, 2026 (instead of by 2030) and achieve a 60% target by December 31, 2030. The legislation also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all State agencies by December 31, 2045.

Statutes and CARB Regulations Addressing the Carbon Intensity of Petroleum-based Transportation Fuels

ASSEMBLY BILL 1493, PAVLEY CLEAN CARS STANDARDS

In 2002, the Legislature enacted Assembly Bill 1493 ("Pavley Bill") (Stats. 2002, ch. 200), which directed CARB to develop and adopt regulations that achieve the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks beginning with model year 2009. (See Health and Safety Code Section 43018.5.) In September 2004, pursuant to this directive, CARB approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year. These regulations created what are commonly known as the "Pavley standards." In September 2009, CARB adopted amendments to the Pavley standards to reduce GHG emissions from new motor vehicles through the 2016 model year. These regulations created what are commonly known as the "Pavley II standards." (See California Code of Regulations, Title 13, Sections 1900, 1961, and 1961.1 et seq.)

In 2012, CARB adopted an Advanced Clean Cars (ACC) program aimed at reducing both smog-causing pollutants and GHG emissions for vehicles model years 2017-2025. This historic program, developed in coordination with the USEPA and NHTSA, combined the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The regulations focus on substantially increasing the number of plug-in hybrid cars and zero-emission vehicles in the vehicle fleet and on making fuels such as electricity and hydrogen readily available for these vehicle

technologies. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. (See California Code of Regulations, Title 13, Sections 1900, 1961, 1961.1, 1961.2, 1961.3, 1965, 1968.2, 1968.5, 1976, 1978, 2037, 2038, 2062, 2112, 2139, 2140, 2145, 2147, 2235, and 2317 et seq.)

It is expected that the Pavley regulations will reduce GHG emissions from California passenger vehicles by about 34 percent below 2016 levels by 2025, all while improving fuel efficiency and reducing motorists' costs.

Statute Intended to Facilitate Land Use Planning Consistent with Statewide Climate Objectives

CALIFORNIA SENATE BILL 375 (SUSTAINABLE COMMUNITIES STRATEGY)

This 2008 legislation built on AB 32 by setting forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHGs. The focus is to reduce miles traveled by passenger vehicles and light trucks. CARB is required to set GHG reduction targets for each metropolitan region for 2020 and 2035.[15] Each of California's metropolitan planning organizations then prepares a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. Once adopted by the metropolitan planning organizations, the sustainable communities strategy is to be incorporated into that region's federally enforceable regional transportation plan. If a metropolitan planning organization is unable to meet the targets through the sustainable communities strategy, then an alternative planning strategy must be developed that demonstrates how targets could be achieved, even if meeting the targets is deemed to be infeasible.

Climate Change Scoping Plans

2017 SB 32 SCOPING PLAN

With the passage of SB 32, the Legislature also passed companion legislation AB 197, which provided additional direction for developing the scoping plan. In response, CARB adopted an updated Scoping Plan in December 2017. The document reflects the 2030 target of reducing statewide GHG emissions by 40 percent below 1990 levels codified by SB 32. The GHG reduction strategies in the plan that CARB will implement to meet the target include:

- SB 350 - achieve 50 percent Renewables Portfolio Standard (RPS) by 2030 and doubling of energy efficiency savings by 2030;
- Low Carbon Fuel Standard - increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020);

[15] The San Joaquin COG region was assigned reduction targets of 12% by 2020 and 16% by 2035.

- Mobile Source Strategy (Cleaner Technology and Fuels Scenario) - maintaining existing GHG standards for light- and heavy-duty vehicles, put 4.2 million zero-emission vehicles on the roads, and increase zero-emission buses, delivery and other trucks.
- Sustainable Freight Action Plan - improve freight system efficiency, maximize use of near-zero emission vehicles and equipment powered by renewable energy, and deploy over 100,000 zero-emission trucks and equipment by 2030;
- Short-Lived Climate Pollutant Reduction Strategy - reduce emissions of methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and reduce emissions of black carbon 50 percent below 2013 levels by 2030;
- SB 375 Sustainable Communities Strategies - increased stringency of 2035 targets;
- Post-2020 Cap-and-Trade Program - declining caps, continued linkage with Québec, and linkage to Ontario, Canada;
- 20 percent reduction in GHG emissions from the refinery sector; and
- By 2018, develop an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

2022 SCOPING PLAN UPDATE

The Draft 2022 Scoping Plan Update was released on May 10, 2022, but has yet to be adopted. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Building Code Requirements Intended to Reduce GHG Emissions

CALIFORNIA ENERGY CODE

The California Energy Code (California Code of Regulations, Title 24, Part 6), which is incorporated into the Building Energy Efficiency Standards, was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Although these standards were not originally intended to reduce GHG emissions, increased energy efficiency results in decreased GHG emissions because energy efficient buildings require less electricity and thus less consumption of fossil fuels, which emit GHGs. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The current 2019 Building Energy Efficiency Standards, commonly referred to as the "Title 24" standards, include changes from the previous standards that were adopted, to do the following:

- Provide California with an adequate, reasonably priced, and environmentally sound supply of energy.
- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its GHG emissions to 1990 levels by 2020.

- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.
- Act on the California Energy Commission's Integrated Energy Policy Report, which finds that standards are the most cost-effective means to achieve energy efficiency, states an expectation that the Building Energy Efficiency Standards will continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Building Energy Efficiency Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions.
- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of State building codes.
- Meet Executive Order S-20-04, the Green Building Initiative, to improve the energy efficiency of non-residential buildings through aggressive standards.

The most recent Title 24 standards are the 2019 Title 24 standards. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. The California Energy Commission updates the standards every three years.

Single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 standards will use about 53 percent less energy than those under the 2016 standards. This will reduce greenhouse gas emissions by 700,000 metric tons over three years, equivalent to taking 115,000 fossil fuel cars off the road. Nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.

CALIFORNIA GREEN BUILDING STANDARDS CODE

The purpose of the California Green Building Standards Code (California Code of Regulations Title 24, Part 11) is to improve public health and safety and to promote the general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: 1) planning and design; 2) energy efficiency; 3) water efficiency and conservation; 4) material conservation and resource efficiency; and 5) environmental quality. The California Green Building Standards, which became effective on January 1, 2011, instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial, low-rise residential uses, and State-owned buildings, as well as schools and hospitals. The mandatory standards require the following:

- 20 percent mandatory reduction in indoor water use relative to baseline levels;
- 50 percent construction/demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

The voluntary standards require the following:

- **Tier I:** 15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, and cool/solar reflective roof.
- **Tier II:** 30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving, 30 percent cement reduction, and cool/solar reflective roof.

SAN JOAQUIN AIR POLLUTION CONTROL DISTRICT

Climate Change Action Plan

On August 21, 2008, the Valley Air District Governing Board approved a proposal called the Climate Change Action Plan (CCAP). The CCAP began with a public process bringing together stakeholders, land use agencies, environmental groups, and business groups to conduct public workshops to develop comprehensive policies for CEQA Guidelines, a carbon exchange bank, and voluntary GHG emissions mitigation agreements for the Governing Board's consideration. The CCAP contains the following goals and actions:

- Develop GHG significance thresholds to address CEQA projects with GHG emission increases.
- Develop the San Joaquin Valley Carbon Exchange for banking and trading GHG reductions.
- Authorize use of the SJVAPCD [Valley Air District's] existing inventory reporting system to allow use for GHG reporting required by AB 32 regulations.
- Develop and administer GHG reduction agreements to mitigate proposed emission increases from new projects.
- Support climate protection measures that reduce greenhouse gas emissions as well as toxic and criteria pollutants. Oppose measures that result in a significant increase in toxic or criteria pollutant emissions in already impacted areas.

On December 17, 2009, the Valley Air District Governing Board adopted "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," and the policy "District Policy—Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency." The Valley Air District concluded that the existing science is inadequate to support quantification of the impacts that project-specific GHG emissions have on global climatic change. The Valley Air District found the effects of project-specific emissions to be cumulative, and without mitigation, their incremental contribution to global climatic change could be considered cumulatively considerable. The Valley Air District found that this cumulative impact is best addressed by requiring all projects to reduce their GHG emissions, whether through project design elements or mitigation.

The Valley Air District's approach is intended to streamline the process of determining whether project-specific GHG emissions would have a significant effect. Projects exempt from the requirements of CEQA, and projects complying with an approved plan or mitigation program would be determined to have a less

than significant cumulative impact. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources and must have a certified final CEQA document.

For non-exempt projects, those projects for which there is no applicable approved plan or program, or those projects not complying with an approved plan or program, the lead agency must evaluate the project against performance-based standards and would require the adoption of design elements, known as a Best Performance Standard, to reduce GHG emissions. The Best Performance Standards (BPS) have not yet fully been established, though they must be designed to effect a 29 percent reduction when compared with the BAU projections identified in the ARB's AB 32 Scoping Plan.

BAU represents the emissions that would occur in 2020 if the average baseline emissions during the 2002–2004 period were grown to 2020 levels, without control. These standards thus would carry with them pre-quantified emissions reductions, eliminating the need for project-specific quantification. Therefore, projects incorporating BPS would not require specific quantification of GHG emissions, and automatically would be determined to have a less than significant cumulative impact for GHG emissions.

For stationary source permitting projects, BPS means, "The most stringent of the identified alternatives for control of GHG emissions, including type of equipment, design of equipment and operational and maintenance practices, which are achieved-in-practice for the identified service, operation, or emissions unit class." The Valley Air District has identified BPS for the following sources: boilers; dryers and dehydrators; oil and gas extraction, storage, transportation, and refining operations; cogeneration; gasoline dispensing facilities; volatile organic compound control technology; and steam generators.

For development projects, BPS means, "Any combination of identified GHG emission reduction measures, including project design elements and land use decisions that reduce project-specific GHG emission reductions by at least 29 percent compared with business as usual."

Projects not incorporating BPS would require quantification of GHG emissions and demonstration that BAU GHG emissions have been reduced or mitigated by 29 percent. As stated earlier, the ARB's adjusted inventory reduced the amount required by the State to achieve 1990 emission levels from 29 percent to 21.7 percent to account for slower growth experienced since the 2008 recession. According to Valley Air District guidance, quantification of GHG emissions would be required for all projects for which the lead agency has determined that an EIR is required, regardless of whether the project incorporates BPS.

Nevertheless, it should be noted that, in light of the Newhall Ranch case, the Supreme Court concluded that a BAU analysis requires substantial evidence to demonstrate what the required percentage reduction from BAU would be for an individual project. The court expressed skepticism that a percentage reduction goal applicable to the State as a whole would apply without change to an individual development project, regardless of its size or location. Therefore, the BAU analysis as identified by SJVAPCD is not employed for this EIR.

San Joaquin Valley Carbon Exchange

The Valley Air District initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions

generated within the San Joaquin Valley. However, the Valley Air District has pursued an alternative strategy that incorporates the GHG emissions into its existing Rule 2301—Emission Reduction Credit Offset Banking that formerly only addressed criteria pollutants. The Valley Air District is also participating with the California Air Pollution Control Officers Association (CAPCOA), of which it is a member, in the CAPCOA Greenhouse Gas Reduction Exchange (GHG Rx). The GHG Rx is operated cooperatively by air districts that have elected to participate. Participating districts have signed a Memorandum of Understanding (MOU) with CAPCOA and agree to post only those credits that meet the Rx standards for quality. The objective is to provide a secure, low-cost, high-quality, GHG exchange for credits created in California. The GHG Rx is intended to help fulfill compliance obligations, or mitigation needs of local projects subject to environmental review, reducing the uncertainty of using credits generated in distant locations.

Rule 2301

While the CCAP indicated that the GHG emission reduction program would be called the San Joaquin Valley Carbon Exchange, the Valley Air District incorporated a method to register voluntary GHG emission reductions into its existing Rule 2301-Emission Reduction Credit Banking through amendments of the rule. Amendments to the rule were adopted on January 19, 2012. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.
- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.
- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

LOCAL

San Joaquin Valley Air Pollution Control District Climate Change Action Plan

In August 2008, the SJVAPCD adopted its Climate Change Action Plan. The Climate Change Action Plan directed the SJVAPCD's Air Pollution Control Officer to develop guidance to assist APCD staff, Valley businesses, land use agencies and other permitting agencies in addressing GHG emissions as part of the CEQA process. Regarding CEQA guidance, some of the goals of the Climate Change Action Plan are to assist local land use agencies, developers and the public by identifying and quantifying GHG emission reduction measures for development projects and by providing tools to streamline evaluation of project-specific GHG effects, and to assist Valley businesses in complying with State law related to GHG emissions.

A product of this direction to provide CEQA guidance is the Final Staff Report – Climate Change Action Plan: Addressing GHG Emissions Impacts, presented to the APCD Board in December 2009. A central component of the Final Staff Report is the establishment of Best Performance Standards, which are specifications or project design elements that identify effective, feasible GHG emission reduction measures. Emission reductions achieved through Best Performance Standards implementation would be pre-quantified, thus negating the need for project-specific quantification of GHG emissions.

For projects not implementing Best Performance Standards, demonstration of a 29% reduction in GHG emissions from business-as-usual conditions is required to determine that a project would have a less than cumulatively significant impact. Appendix J of the Final Staff Report provides a table of GHG emission reduction measures for development projects, along with a point value that corresponds to a percentage decrease in GHG emissions when available.

San Joaquin County Regional Transportation Plan/Sustainable Communities Strategy (SCS/RTP)

The 2014 San Joaquin County Regional Transportation Plan, which has been named "Valley Visions San Joaquin," was the first RTP in San Joaquin County to contain a SCS, the result of the Sustainable Communities and Climate Protection Act of 2008 (i.e., SB 375). The SCS coordinates future transportation investments and land use strategies to prioritize a multi-modal investment plan covering a 27-year period extending out to 2040. An update to the 2014 RTP/SCS was adopted in June 2018 (the 2018 RTP/SCS).

The RTP is a long-range transportation plan that guides the region's transportation improvements over a minimum of 20-years and is updated every four. Using growth forecasts and economic trends projected out over study timeframe, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs. The RTP addresses all transportation modes including motor vehicles, transit (commuter and local), rail (commuter and inter-regional), goods movement (rail, truck, and water), bicycle and pedestrian facilities, aviation systems, transportation systems management (TSM) and transportation demand management (TDM) programs, and other projects considered over the planning horizon of 2042. Regional transportation improvement projects proposed to be funded, in whole or in part, in the state transportation improvement program must be included in the adopted RTP.

The eight counties of the San Joaquin Valley are coordinating on some aspects of these planning efforts to maximize resources, with each area's Metropolitan Planning Organization (MPO) developing a separate plan. MPOs are responsible for setting transportation policy and priorities for a region and documenting how transportation funds will be spent in a Regional Transportation Plan. The policies contained in the 2018 RTP/SCS are as follows:

- Enhance the Environment for Existing and Future Generations and Conserve Energy
- Maximum Mobility and Accessibility
- Increase Safety and Security
- Preserve the Efficiency of the Existing Transportation System
- Support Economic Vitality
- Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts
- Maximize Cost-Effectiveness
- Improve the Quality of Life for Residents

The Greenhouse Gas Reduction Targets for the 2018 San Joaquin County RTP are as follows:

- 5% per capita reduction from 2005 levels by 2020

- 10% per capita reduction from 2005 levels by 2035

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to air quality. General Plan policies applicable to the Project are identified below:

POLICIES: AIR QUALITY ELEMENT

- AQ-1.1-P1. The City shall promote land use patterns that reduce the number and length of motor vehicle trips.
- AQ-1.1-P2. To the extent feasible, the City shall maintain a balance and match between jobs and housing.
- AQ-1.2-P1. The City shall assess air quality impacts using the latest version of the CEQA Guidelines and guidelines prepared by the San Joaquin Valley Air Pollution Control District.
- AQ-1.2-P2. The City shall assess through the CEQA process any air quality impacts of development projects that may be insignificant by themselves, but cumulatively significant.
- AQ-1.2-P3. Developers shall implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects.
- AQ-1.2-P4. New development projects should incorporate energy efficient design features for HVAC, lighting systems and insulation that exceed Title 24.
- AQ-1.2-P5. Use of solar water and pool heaters is encouraged.
- AQ-1.2-P6. Installation of solar voltaic panels on new homes and businesses shall be encouraged.
- AQ-1.2-P7. Trees should be planted on the south- and west-facing sides of new buildings or building undergoing substantial renovation in order to reduce energy usage.
- AQ-1.2-P12. New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and, based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.
- AQ-1.2-P13. Dust control measures consistent with San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and all grading permits.
- AQ-1.2-P14. Developments that significantly impact air quality shall only be approved if all feasible mitigation measures to avoid, minimize or offset the impact are implemented.
- AQ-1.2-P15. Encourage businesses to electrify loading docks or implement idling-reduction systems so that trucks transporting refrigerated goods can continue to power cab cooling elements during loading, layovers, and rest periods.
- AQ-1.3-P3. The City shall encourage employers to establish Transportation Demand Management programs.
- AQ-1.4-P1. The City shall continue to consult with other local, regional and State agencies on air quality planning efforts as well as encourage community participation in air quality planning.
- AQ-1.4-P2. The City shall be proactive in educating the public about the linkages between land use, transportation and air quality.
- AQ-1.4-P3. The City shall be proactive in reducing greenhouse gas emissions from City operations as well as new or renovated development.

City of Tracy Sustainability Action Plan

The City of Tracy Sustainability Action Plan was adopted in 2011 to achieve sustainability in numerous sectors including GHG emissions, energy, and transportation and land use. The Sustainability Action Plan includes specific measures to be implemented that the City estimates will reduce GHG emissions by 378,461 to 482,154 metric tons (MT) of CO_2e. These reductions would come in part from reductions in Vehicle Miles Traveled (VMT) and energy consumption. However, is should be noted that the sustainability measures included with the City of Tracy Sustainability Action Plan do not apply to land use projects.

3.2.3 IMPACTS AND MITIGATION MEASURES

GREENHOUSE GAS EMISSIONS THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

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

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

For future projects, the significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). The City of Tracy does not currently have a formal GHG emissions reduction plan or recommended emissions thresholds for determining significance associated with GHG emissions from development projects.

Since no other local or regional Climate Action Plan is in place, the Project is assessed for its consistency with CARB's adopted Scoping Plan policies. This would be achieved with an assessment of the project's compliance with relevant Scoping Plan measures contained in the CARB's 2022 Scoping Plan, as well as the latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the region the Project is located within (i.e. the San Joaquin Council of Governments (SJCOG) 2022 RTP/SCS, or the SJCOG 2022 RTP/SCS, which was adopted on August 22, 2022). Moreover, a quantitative assessment of the Project's Vehicle Miles Traveled (VMT) per capita and VMT per employee, compared to the No Build scenario, is also provided. Therefore, this analysis provides both a qualitative assessment of the Project's compliance with the applicable plans, policies, and regulations, as well as a quantitative assessment of the Project's VMT efficiency, for the purposes of reducing greenhouse gas emissions to determine whether the project would have a significant impact on the environment relative to GHGs.

IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Project implementation has the potential to generate GHG emissions that could have a significant impact on the environment and/or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (Less than Significant)

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Implementation of the proposed Project would contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O), from mobile sources and utility usage.

Development that occurs because of implementation of the proposed Project would include activities that emit greenhouse gas emissions over the short and long term. A summary of short- and long-term emissions and the analysis for each are included below.

The major projected impacts of climate change in Lathrop are expected to be more days of extreme heat over longer periods, as well as potential for flooding. Short-term and long-term emissions typically associated with construction and operations of future development projects, which may occur because of implementation of the proposed Project, are further described below.

SHORT-TERM EMISSIONS

Short-term greenhouse gas emissions would occur because of construction equipment used for the following: demolition, grading, paving, and building construction activities associated with future development associated with the proposed Project over the next 20 years. GHG emissions would also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. As such, SJVAPCD recommends in its draft threshold to amortize project-specific construction emissions over a 30-year operational lifetime of a project. This normalizes construction emissions so that they can be grouped with operational emissions to generate a precise project GHG inventory. However, the SJVAPCD does not have a current threshold of significance for construction-related GHG emissions for plan-level impacts (including General Plans amendments).

Adoption of the proposed Project does not directly approve or otherwise entitle any new development projects or infrastructure improvement projects in Tracy. As such, the construction-related GHG emissions of future projects cannot be known or quantified at this time, as it would be highly speculative. Typically, construction-related GHG emissions contribute unsubstantially (less than one percent) to a project's

annual greenhouse gas emissions inventory and mitigation for construction-related emissions is not effective in reducing a project's overall contribution to climate change, given how small of a piece of the total emissions construction emissions are. Short-term climate change impacts due to future construction-related activities would be subject to State requirements for GHG emissions and would be assessed on project-by-project basis, as required by the SJVAPCD.

LONG-TERM EMISSIONS

Future development projects associated with the proposed Project will result in continuous GHG emissions from mobile, area, and operational sources. Mobile sources, including vehicle trips to and from development projects, will result primarily in emissions of CO_2, with minor emissions of CH_4 and N_2O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by future development and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas inventory for typical development projects.

The rezones identified in the Housing Element associated with the proposed Project total approximately 240 acres and would accommodate 6,616 units, and an associated population increase of approximately 21,436 persons. This new growth will undoubtedly result in increases in the emissions of criteria pollutants, most notably from mobile-source and area-source emissions increases associated with increased growth and development in Tracy. Additionally, the implementation of individual projects associated with the proposed Project would have the potential to conflict with the SJVAPCD's thresholds of significance for criteria pollutants at the project-level.

The following quantitative analysis describes VMT per capita and VMT per employee, for both the 2045 No Build and 2046 Build scenarios. As part of the transportation analysis, Kimley Horn (the traffic consultant) modeled VMT for the Planning Area for air quality analysis purposes. As described by the transportation analysis, and as described in greater detail in Section 3.4, Transportation, the 2045 No Build scenario resulted in a VMT per capita of 17.5 and a VMT per employee of 13.0. The 2046 Buildout scenario resulted in a VMT per capita of 15.3 and VMT per employee of 13.4. Notably, the VMT per capita value is reduced by 2.2 VMT per capita between the 2046 No Build and the 2046 Buildout scenarios for residential uses. The VMT per employee value is slightly increased by 0.4 VMT per employee between the 2046 No Build and 2046 Buildout scenarios for employment uses. As such the Project yields lower overall VMT for the Build scenario compared to the No Build scenario. These results are summarized in **Table 3.2-2**.

TABLE 3.2-2: VEHICLE MILES TRAVELED (VMT)

JURISDICTION	*2046 NO BUILD*		*2046 BUILDOUT*	
	VMT/CAPITA	*VMT/EMPLOYEE*	*VMT/CAPITA*	*VMT/EMPLOYEE*
Tracy SOI	17.5	13.0	15.3	13.4

SOURCE: KIMLEY HORN, 2025

As shown in Table 3.2-2, implementation of the proposed Project would result in a reduction in VMT per capita and slight increase in VMT per employee. This is largely due to an emphasis on infill development and increases in overall residential density within Tracy.

The existing General Plan includes numerous policies that would further the fundamental goals of the SJVAPCD in reducing emissions of criteria pollutants associated with vehicle miles traveled, reducing building energy usage, and increasing usage of renewable forms of energy. For example, Air Quality Element Policy AQ-1.1-P1 promotes land use patterns the reduce the number and length of motor vehicle trips. Policy AQ-1.1-P2 encourages the City to maintain a balance and match between jobs and housing. Policy AQ-1.2-P4 encourages developers to implement best management practices to reduce air pollutant emissions associated with the construction and operation of development projects. Further, Policy AQ-1.2-P5 encourages the usage of solar water and pool heaters. Additionally, Policy AQ-1.2-P6 encourages the installation of solar voltaic panels on new homes and businesses.

It should be noted that growth projections for the proposed Project should not be considered a prediction for growth, as the actual amount of development that will occur throughout the 20-year horizon of the proposed Project is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, and other factors.

2022 SCOPING PLAN CONSISTENCY

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045. These measures build upon those identified in the previous Scoping Plan updates. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted subsequently as required to achieve Statewide GHG emissions targets.

Table 3.2-3 summarizes the Project's consistency with applicable policies and measures of the 2022 Scoping Plan. As indicated in Table 3.2-3, the Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support four of the action categories through energy efficiency, water conservation, recycling, and landscaping.[16]

[16] Analysis of a project in relation to Appendix D of the 2022 Scoping Plan is most appropriate for individual development projects. Since the Project does not consist of a single development project, an analysis of Appendix D of the 2022 Scoping Plan is not provided herein.

TABLE 3.2-3: PROJECT CONSISTENCY WITH CARB 2022 SCOPING PLAN

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
AREA		
SCAQMD Rule 445 (Wood Burning Devices)	Restricts the installation of wood-burning devices in new development.	Mandatory Compliance. Approximately 15 percent of California's major anthropogenic sources of black carbon include fireplaces and woodstoves.[1] The Project would not include hearths (woodstove and fireplaces) as mandated by this rule.
ENERGY		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires PG&E to utilize 50 percent of its electricity resources by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	No Conflict. The Project would utilize electricity provided by Pacific Gas & Electric (PG&E), which is required to meet the 2030, 2045, and 2050 renewable performance standards. In 2022, 38.3 percent of PG&E's electricity came from renewable resources.[17]
All Electric Appliances for New Residential and Commercial Buildings (AB 197)	All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	Consistent. Project-specific construction plans would be required to demonstrate that the Project only install all electric appliances for applicable residential development post-2026 and any applicable commercial development post-2029.
California Code of Regulations, Title 24, Building Standards Code	Requires compliance with energy efficiency standards for residential and nonresidential buildings.	Mandatory Compliance. Future development associated with Project implementation would be required to meet the applicable requirements of the 2022 Title 24 Building Energy Efficiency Standards, including installation of rooftop solar panels and additional CALGreen requirements (see discussion under CALGreen Code requirements below).
California Green Building Standards (CALGreen) Code Requirements	All bathroom exhaust fans are required to be ENERGY STAR compliant.	Mandatory Compliance. Project-specific construction plans would be required to demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment are ENERGY STAR compliant.
	HVAC system designs are required to meet	Mandatory Compliance. Project-specific

[17] See: https://www.pge.com/content/dam/pge/docs/account/billing-and-assistance/bill-inserts/1023-Power-Content-Label.pdf

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
	American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	construction plans would be required to demonstrate that the HVAC system meets the ASHRAE standards.
	Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.	Mandatory Compliance. Specific development projects would be required to install air filtration systems (MERV 8 or higher) as part of its compliance with the 2022 Title 24 Building Energy Efficiency Standards.
	Refrigerants used in newly installed HVAC systems shall not contain any chlorofluorocarbons.	Mandatory Compliance. Specific development projects would be required to meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces is required for such vehicles.	Mandatory Compliance. Specific development projects would be required to meet this requirement as part of its compliance the CALGreen Code.
MOBILE SOURCES		
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems, and reduction of vehicle miles traveled.	Consistent. The Project would be consistent with this strategy by supporting the use of zero-emission and low-emission vehicles; refer to CALGreen Code discussion above.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	Consistent. As demonstrated in Table 3.2-4, the Project would comply with the San Joaquin Council of Governments (SJCOG) 2022 Regional Transportation Plan/Sustainable Communities Strategy (2022 RTP/SCS), and therefore, the Project would be consistent with SB 375.
WATER		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non-residential uses.	Mandatory Compliance. Refer to the discussion under 2022 Title 24 Building Standards Code and CALGreen Code, above.
Water Conservation Act of 2009 (Senate Bill X7-7)	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces	Consistent. Refer to the discussion under 2022 Title 24 Building Standards Code and CALGreen Code, above.

SECTOR/SOURCE	*CATEGORY/DESCRIPTION*	*CONSISTENCY ANALYSIS*
	emissions from wastewater treatment.	
SOLID WASTE		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandates that State agencies develop and implement an integrated waste management plan which outlines the steps to divert at least 50 percent of solid waste from disposal facilities. AB 341 directs the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	Mandatory Compliance. The Project would be required to comply with AB 341 which requires multifamily residential dwelling of five units or more to arrange for recycling services. This would reduce the overall amount of solid waste disposed of at landfills. The decrease in solid waste would in return decrease the amount of methane released from decomposing solid waste.

SOURCE: CALIFORNIA AIR RESOURCE BOARD, 2022 SCOPING PLAN. AVAILABLE: HTTPS://WW2.ARB.CA.GOV/RESOURCES/DOCUMENTS/2022-SCOPING-PLAN-DOCUMENTS

CONSISTENCY WITH SJCOG'S 2022 RTP/SCS

The proposed Project is analyzed for consistency with the strategies contained in the latest adopted SJCOG RTP/SCS (i.e., SJCOG's 2022 RTP/SCS). With the passage of SB 375 in 2008, metropolitan planning organizations were required to develop an SCS, which must demonstrate an ambitious, yet achievable, approach to how land use development and transportation can work together to meet greenhouse gas emission reduction targets for cars and light trucks. These targets, set by the California Air Resources Board, call for the region to reduce per capita emissions. Table **3.2-4** provides this consistency analysis.

TABLE 3.2-4: PROJECT CONSISTENCY WITH SJCOG'S 2022 RTP/SCS

RTP/SCS POLICY	*PROJECT CONSISTENCY*
Policy 1: Enhance the Environment for Existing and Future Generations and Conserve Energy	**Consistent**. The proposed Project would meet the requirements of Title 24 for energy efficient design.
Policy 2: Maximize Mobility and Accessibility	**Consistent**. The proposed Project would be compatible to the surrounding area. The proposed Project's location is largely infill and in locations where there is relatively nearby access to other parts of the city.
Policy 3: Increase Safety and Security	**Consistent**. The proposed Project residences would be developed primarily in locations where existing residences are located, preserving safety and security for inhabitants.
Policy 4: Preserve the Efficiency of the Existing Transportation System	**Consistent**. The proposed Project would not interfere with the efficiency a of the existing transportation system. Specifically, VMT per capita would be slightly reduced, when compared with the No Build alternative.
Policy 5: Support Economic Vitality	**Consistent**. The proposed Project would not interfere with economic activity, and supports the implementation of transportation improvements within the Planning Area (since the individual developments associated with the Project would pay their fair share of traffic improvements).

RTP/SCS POLICY	*PROJECT CONSISTENCY*
Policy 6: Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts	**Not Applicable**. The proposed Project is not a transportation project.
Policy 7: Maximize Cost-Effectiveness	**Consistent**. The proposed Project's residential developments are located in areas that are appropriate for residential uses. Moreover, the proposed Project utilizes existing transportation corridors.
Policy 8: Improve the Quality of Life for Residents	**Consistent**. The proposed Project implements a primarily residential Project in areas that have been planned for residential land uses, located away from incompatible land uses. Therefore, the proposed Project avoids being sited in an area that would be highly sensitive to the physical environmental impacts associated with the proposed Project, thereby maintaining quality of life for residents in the City of Tracy and the region.

SOURCE: SAN JOAQUIN COUNCIL OF GOVERNMENTS (SJCOG). 2022. THE 2022 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY (RTP/SCS). ADOPTED AUGUST 2022. WEBSITE: HTTPS://SJCOG.ORG/608/ADOPTED-2022-RTPSCS-PLAN

EXECUTIVE ORDER S-3-05

The Executive Order S-3-05 2050 target has not been codified by legislation. However, studies have shown that, in order to meet the 2050 target, aggressive pursuit of technologies in the transportation and energy sectors, including electrification and the decarbonization of fuel, will be required. Because of the technological shifts required and the unknown parameters of the regulatory framework in 2050, quantitatively analyzing the project's impacts further relative to the 2050 goal is speculative for purposes of CEQA.

The CARB recognizes that AB 32 establishes an emissions reduction trajectory that will allow California to achieve the more stringent 2050 target: "These [greenhouse gas emission reduction] measures also put the State on a path to meet the long-term 2050 goal of reducing California's GHG emissions to 80 percent below 1990 levels. This trajectory is consistent with the reductions that are needed globally to stabilize the climate." In addition, the CARB's First Update to the Scoping Plan "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by the CARB would serve to reduce the proposed project's post-2020 emissions level to the extent applicable by law:

- Energy Sector: Continued improvements in California's appliance and building energy efficiency programs and initiatives, such as the State's zero net energy building goals, would serve to reduce the proposed project's emissions level. Additionally, further additions to California's renewable resource portfolio would favorably influence the project's emissions level.
- Transportation Sector: Anticipated deployment of improved vehicle efficiency, zero-emission technologies, lower carbon fuels, and improvement of existing transportation systems all will serve to reduce the project's emissions level.
- Water Sector: The project's emissions level will be reduced as a result of further utilization to water conservation technologies.

- Waste Management Sector: Plans to further improve recycling, reuse and reduction of solid waste will beneficially reduce the project's emissions level.

In his January 2015 inaugural address, Governor Brown expressed a commitment to achieve "three ambitious goals" that he wanted to see accomplished by 2030 to reduce the State's GHG emissions:

- Increasing the State's Renewable Portfolio Standard from 33 percent in 2020 to 50 percent in 2030;
- Cutting the petroleum use in cars and trucks in half; and
- Doubling the efficiency of existing buildings and making heating fuels cleaner.

These expressions of executive branch policy may be manifested in adopted legislative or regulatory action through the State agencies and departments responsible for achieving the State's environmental policy objectives, particularly those relating to global climate change.[18]

Further, studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the Statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the State to meet the 2050 target.[19]

Given the proportional contribution of mobile source-related GHG emissions to the State's inventory, recent studies also show that relatively new trends—such as the increasing importance of web-based shopping, the emergence of different driving patterns, and the increasing effect of web-based applications on transportation choices—are beginning to substantially influence transportation choices and the energy used by transportation modes. These factors have changed the direction of transportation trends in recent years and will require the creation of new models to effectively analyze future transportation patterns and the corresponding effect on GHG emissions. For the reasons described above, the proposed project's post-2020 emissions trajectory is expected to follow a declining trend, consistent with the 2030 and 2050 targets.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that operation of the Project would be required to comply with whatever measures are enacted that State lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050. In its 2008 Scoping Plan, the CARB acknowledged that the "measures needed to meet the 2050 are too far in the future to define in detail." In the 2017 Scoping Plan Update, however, the ARB generally

[18] Brown, Edmund G. Jr. 2015. Press Release: California Establishes Most Ambitious Greenhouse Gas Goal in North America. April 29. Website: https://archive.gov.ca.gov/archive/gov39/2015/04/29/news18938/index.html#:~:text=SACRAMENTO%20%E2%80%93%20Governor%20Edmund%20G.,next%20decade%20and%20a%20half. Accessed August 26, 2024.

[19] Energy and Environmental Economics, 2015. Pathways to Deep Carbonization in the United States. Website: https://biotech.law.lsu.edu/blog/US-Deep-Decarbonization-Report.pdf. Accessed August 26, 2024.

described the type of activities required to achieve the 2050 target: "energy demand reduction through efficiency and activity changes; large scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and rapid market penetration of efficiency and clean energy technologies that requires significant efforts to deploy and scale markets for the cleanest technologies immediately." The 2022 Scoping Plan Update provides an intermediate target that is intended to achieve reasonable progress toward the 2050 target.

CONCLUSION

The proposed Project would be consistent with relevant plans, policies, and regulations associated with GHGs, notably the 2022 Scoping Plan, and the SJCOG's 2022 RTP/SCS. Taking into account the proposed Project's emissions, and the progress being made by the State toward reducing emissions in key sectors such as transportation, industry, and electricity, the Project would be consistent with State GHG Plans and would not impede the State's goals of reducing GHG emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. Moreover, the proposed Project's VMT would increase at a rate slower rate than the increase in jobs and population growth. The proposed Project would make a reasonable fair share contribution to the State's GHG reduction goals, and therefore, the proposed Project's GHG emissions would be considered to have a ***less-than-significant*** *impact*.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

SIGNIFICANCE AFTER MITIGATION

Less Than Significant

This section provides a general description of existing noise sources, a discussion of the regulatory setting, and identifies potential noise impacts associated with new development in the City of Tracy. Project impacts are evaluated relative to applicable noise level criteria and to the existing ambient noise environment. Mitigation measures have been identified for potentially significant noise-related impacts.

3.3.1 ENVIRONMENTAL SETTING

KEY TERMS

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given area consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, defined as ten times the logarithm of the ratio of the sound pressure squared over the reference pressure squared.
CNEL	Community noise equivalent level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic acoustic signal, expressed in cycles per second or Hertz.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
L_{dn}	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
L_{eq}	Equivalent or energy-averaged sound level.
L_{max}	The highest root-mean-square (RMS) sound level measured over a given period of time.
$L_{(n)}$	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L_{50} is the sound level exceeded 50 percent of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
SEL	Sound exposure levels. A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy into a one-second event.

FUNDAMENTALS OF ACOUSTICS

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure

variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to L_{dn} but includes a +5 dB penalty for evening noise. **Table 3.3-1** lists several examples of the noise levels associated with common situations.

TABLE 3.3-1: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	*NOISE LEVEL (DBA)*	*COMMON INDOOR ACTIVITIES*
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. SEPTEMBER 2013.

EFFECTS OF NOISE ON PEOPLE

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

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

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

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

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE LEVELS

Existing and Surrounding Land Uses

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise-sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing single-family and multifamily residential uses.

Existing Traffic Noise Environment at Sensitive Receptors

METHODOLOGY

To predict existing noise levels due to traffic, the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD77108) was used. The model is based upon the Calveno reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. Traffic volumes for existing conditions were obtained from the traffic data prepared for the Project. Truck percentages and vehicle speeds on the local area roadways were estimated from field observations.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each Project-area roadway segment. Where traffic noise barriers, such as a proposed sound wall, are predominately located along a roadway segment, a -5 dB offset was added to the noise prediction model to account for various noise barrier heights. A -5 dB offset was also applied where outdoor activity areas are shielded by intervening buildings. In some locations, sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the Project-area roadway segments shown in the Traffic Noise Calculation Inputs and Results (Appendix C).

OFF-SITE TRAFFIC NOISE

Table 3.3-2 summarizes the modeled traffic noise levels at the nearest sensitive receptors along each roadway segment in the Project area. Appendix C provides the complete inputs and results of the FHWA traffic modeling.

TABLE 3.3-2: TRAFFIC NOISE LEVEL INCREASES

ROADWAY	*SEGMENT*	*2045 NO BUILD*	*2045 WITH BUILD*	*CHANGE*
I-205	West of Eleventh Street	75.6	75.7	0.1
I-205	Between Eleventh Street and Corral Hollow	76.2	76.2	0.0
I-205	Between Corral Hollow and MacArthur Drive	77.0	76.9	-0.1
I-205	East of MacArthur Drive	82.1	82.0	-0.1
I-580	North of Corral Hollow	79.1	79.1	0.0
I-580	South of Corral Hollow	77.9	77.8	-0.1
Grant Line Road	West of Corral Hollow	68.1	68.1	0.0
Grant Line Road	East of Corral Hollow	59.6	59.4	-0.2
Grant Line Road	East of Tracy Boulevard	58.1	58.1	0.0
Grant Line Road	East of Chrisman Road	46.6	46.5	-0.1
Eleventh Street	East of Lammers Road	65.1	65.0	-0.1
Eleventh Street	East of Corral Hollow	63.1	63.0	-0.1
Eleventh Street	East of MacArthur Drive	62.8	62.8	0.0
Schulte Road	West of Corral Hollow	59.2	59.0	-0.2
Schulte Road	East of Corral Hollow	61.8	61.7	-0.1
Schulte Road	East of Tracy Boulevard	60.0	60.1	0.1
Schulte Road	East of MacArthur Drive	53.1	54.4	1.3
Valpico Road	East of Tracy Boulevard	56.7	56.7	0.0
Valpico Road	East of MacArthur Drive	58.8	58.9	0.1
Linne Road	East of Corral Hollow	63.2	63.3	0.1
Linne Road	East of Tracy Boulevard	61.8	61.8	0.0
Lammers Road	South of Byron Rd.	47.8	47.7	-0.1
Lammers Road	South of Eleventh Street	49.4	49.3	-0.1
Lammers Road	North of Valipico Road	58.7	58.6	-0.1
Corral Hollow Road	South of Grant Line Road	62.7	62.7	0.0
Corral Hollow Road	South of Eleventh Street	65.2	65.1	-0.1
Corral Hollow Road	South of Schulte Road	61.0	60.9	-0.1
Corral Hollow Road	North of Valpico Road	57.6	57.5	-0.1
Tracy Boulevard	North of Grant Line Road	60.9	61.2	0.3
Tracy Boulevard	South of Grant Line Road	61.8	61.8	0.0
Tracy Boulevard	North of Eleventh Street	61.1	61.2	0.1

ROADWAY	*SEGMENT*	*2045 NO BUILD*	*2045 WITH BUILD*	*CHANGE*
Tracy Boulevard	South of Eleventh Street	62.0	62.1	0.1
Tracy Boulevard	North of Schulte Road	58.8	59.1	0.3
Tracy Boulevard	South of Schulte Road	64.1	64.2	0.1
Tracy Boulevard	South of Valpico Road	62.3	62.3	0.0
MacArthur Drive	South of I-205	59.1	59.2	0.1
MacArthur Drive	South of Grant Line Road	61.4	61.3	-0.1
MacArthur Drive	South of Eleventh Street	55.5	55.1	-0.4
MacArthur Drive	North of Valpico Road	51.4	51.4	0.0
MacArthur Drive	South of Valpico Road	54.1	54.2	0.1
Chrisman Road	South of Eleventh Street	61.0	61.4	0.4
Chrisman Road	South of Schulte Road	62.6	62.7	0.1
Byron Road	West of Corral Hollow Rd.	56.3	56.0	-0.3
Corral Hollow Road	North of Grant Line Road	58.5	58.5	0.0
Lammers Road	South of Valpico Road	62.3	62.2	-0.1
Corral Hollow Road	South Valpico Road	50.9	50.9	0.0

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM KIMLEY-HORN AND SAXELBY ACOUSTICS, 2024.

Based upon the Table 3.3-2 data, the proposed Project is predicted to result in an increase in a maximum traffic noise level of 1.3 dBA.

Existing Airport Noise Environment

Several of the candidate sites are located within 2.0 miles, or less, from the Tracy Municipal Airport. Noise contours for these airports, and the closest candidate sites within 2.0 miles of the airport, are shown on Figure 3.3-1.

PROJECT OPERATIONAL NOISE AT SENSITIVE RECEPTORS

The project would potentially allow for up to 6,616 new housing units developed over 240.8 acres with a maximum density of 35 units per acre. Typical noise sources associated with residential housing include garbage collection, parking lots, and HVAC equipment. These types of noise sources are typical of all residential uses and are typically considered compatible with existing residential uses, and other noise-sensitive receptors, without needing special noise control measures. Typically, noise levels from these types of developments do not exceed the City of Tracy exterior noise standards at the boundaries of the project.

While no specific site plans have been developed, Saxelby Acoustics modeled an example project for up to 161 units on the 4.6-acre project site located at the intersection of West Lowell Avenue and Lincoln Boulevard. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar operations.

- Saxelby Acoustics estimated that a 161-unit site could generate approximately 92 trips in the peak hour. Saxelby Acoustics assumed that 1-2 of these trips could be heavy trucks to account for trash collection or deliveries. Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks.

- Each residential unit was assumed to be serviced by a single three-ton HVAC unit. The units were assumed to have a sound level rating of 70 dBA (manufacturer's data).

Saxelby Acoustics used the SoundPLAN noise prediction model to map noise levels emanating from the example project site. Inputs to the model included sound power levels as outlined above, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. Figure 3.3-2 shows the noise level contours resulting from the example 136-unit development in terms of the average (L_{eq}) project noise level.

3.3.2 REGULATORY SETTING

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, includes questions that indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA case law also addresses noise impacts. (See *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 883-894.) CEQA standards are discussed more below under the Thresholds of Significance section.

Governor's Office of Planning and Research

The State of California General Plan Guidelines, published by the Office of Planning and Research (OPR), provides guidance for the acceptability of projects within specific CNEL or L_{dn} contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

State Building Code, Title 24, Part 2 of the State of California Code of Regulations

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations, establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior

sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

LOCAL

City of Tracy General Plan

The Noise Element establishes standards to provide compatible noise environments for new development or redevelopment projects and to control excessive noise exposure of existing developments. Goals, policies, actions, and standards provided in the Noise Element provide the basis for decision-making on determining land use compatibility with noise sources associated with the proposed Project, as well as mitigation requirements. The following objectives and policies are specfically relavaent to the proposed project:

Objective N-1.2 Control sources of excessive noise.

Policies

P2. Mitigation measures shall be required for new development projects that exceed the following criteria:

- Cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level.
- Cause the L_{dn} at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable."
- Cause new noise levels to exceed the City of Tracy Noise Ordinance Limits.

P4. All construction in the vicinity of noise sensitive land uses, such as residences, hospitals, or convalescent homes, shall be limited to daylight hours or 7:00 a.m. to 7:00 p.m. In addition, the following construction noise control measures shall be included as requirements at construction sites to minimize construction noise impacts:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

Figure 9-3 of the Noise Element shows a summary of different land uses in the City and their associated acceptable and unacceptable noise levels. These guidelines state that environments with

noise levels ranging up to 60 dBA L_{dn} are considered "normally acceptable" for new residential land use development; environments with ambient noise levels greater than 60 dBA and up to 75 dBA Ldn are considered "conditionally acceptable" for new residential development.

City of Tracy Municipal Code

Title 4, Chapter 12, Article 9 of the Tracy Municipal Code also contains guidance with the intent to control noise and vibration to promote and maintain the health, safety, and welfare of its residents. Section 4.12.720 of the Municipal Code generally prohibits certain activities that have the potential to result in loud, excessive, or unreasonable noise levels. Section 4.12.750 establishes numerical average noise level standards which are shown in **Table 3.3-3**.

TABLE 3.3-3: NOISE PERFORMANCE STANDARDS – CORRECTION FACTORS

BASE DISTRICT ZONE	*SOUND LEVEL LIMITS (DECIBELS)*
1. Residential Districts RE (Residential Estate) LDR (Low Density) MDR/MDC (Medium Density) HDR (High Density) RMH (Mobile Home)	55
2. Commercial Districts MO (Medical Office) POM (Professional Office and Medical) NS (Neighborhood Shopping) CBD (Central Business District) GHC (General Highway) H-s (Highway Service)	65
3. Industrial Districts M-1 (Light Industrial) M-2 (Heavy Industrial)	75
4. A (Agricultural)	75
5. AMO Aggregate Mineral Overlay Zone	75

(Prior code § 4-3.1004)

Specific activities enumerated in the municipal code that could potentially pertain to the proposed project include minor maintenance to or improvement of real property. This limitation prohibits the generation of construction noise, other than between the hours of 7:00 a.m. and 10:00 p.m. on weekdays or between the hours of 7:00 a.m. and 10:00 p.m. on weekends and federal holidays. The noise ordinance also specifically prohibits the operation of any pneumatic or air hammer, pile driver, steam shovel, derrick, steam or electric hoist, parking lot cleaning equipment, or other appliance, the use of which is attended by loud or unusual noise, between the hours of 10:00 p.m. and 7:00 a.m on weekends and federal holidays.

VIBRATION STANDARDS

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

The City of Tracy does not have specific policies pertaining to vibration levels. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 3.3-4** indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). A threshold of 0.20 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 3.3-4: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

PEAK PARTICLE VELOCITY		*HUMAN REACTION*	*EFFECT ON BUILDINGS*
MM/SEC.	*IN./SEC.*		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling – houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

3.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G.

Consistent with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on noise if it would:

- Generate 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;
- Generate excessive groundborne vibration or groundborne noise levels; and/or
- 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.

Determination of a Significant Increase in Noise Levels

IMPACTS DUE TO TEMPORARY CONSTRUCTION NOISE INCREASES

With temporary noise impacts (construction), identification of "substantial increases" depends upon the duration of the impact, the temporal daily nature of the impact, and the absolute change in decibel levels. Per the City of Tracy Municipal Code, construction activities operating between 7:00 p.m. and 7:00 a.m. or daylight hours, which create a noise disturbance at the property boundary of a residence are prohibited and would be considered a significant impact.

The City has not adopted any formal standard for evaluating temporary construction noise or defined the allowable hours during which construction noise may be emitted. For short-term noise associated with Project construction, Saxelby Acoustics recommends use of the California Department of Transportation (Caltrans) increase criteria of 12 dBA,[1] applied to existing residential receptors in the Project vicinity. This level of increase is approximately equivalent to a doubling of sound energy and has been the standard of significance for Caltrans projects at the state level for many years. Application of this standard to construction activities is considered reasonable considering the temporary nature of construction activities.

[1] Caltrans. April 2020. Traffic Noise Protocol [Page 18].

IMPACTS DUE TO PERMANENT NOISE INCREASES

The City of Tracy General Plan Noise Element specifies criteria for determination of significant noise impacts in Policy P2. As stated in the City of Tracy General Plan Policy P2, mitigation measures shall be required for new development projects under the following conditions:

- Causes the L_{dn} at noise-sensitive uses to increase 3 dB or more and exceed the "normally acceptable level;
- Causes the L_{dn} at noise-sensitive uses increase 5 dB or more and remain "normally acceptable" level;
- Cause new noise levels to exceed the City of Tracy Noise Ordinance limits.

Based on Policy P2, an increase in the traffic noise level of 3 dB or more and exceed the "normally acceptable" level would be significant, or 5 dB or more and remain "normally acceptable". Extending this concept to lower noise levels, new noise levels that exceed the City of Tracy Noise Ordinance limits would be significant. The rationale for the Policy P2 criteria is that as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: The proposed Project would not generate 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)

TRAFFIC NOISE ENVIRONMENT AT OFF-SITE RECEPTORS WITH AND WITHOUT THE PROJECT

Implementation of the proposed Project would result in an increase in daily traffic volumes on the local roadway network, and consequently, an increase in noise levels from traffic sources along affected segments. **Table 3.3-5** shows the predicted traffic noise level increases on the local roadway network for the 2045 no Build and 2045 with Build conditions. Appendix C provides the complete inputs and results of the FHWA traffic noise modeling.

TABLE 3.3-5: SIGNIFICANCE ANALYSIS OF TRAFFIC NOISE LEVEL INCREASES

ROADWAY	*SEGMENT*	*APPROX. RECEPTOR DISTANCE*	*NOISE LEVELS (L_{DN}, DB) AT NEAREST SENSITIVE RECEPTORS*				
			2045 NO BUILD	*2045 WITH BUILD*	*CHANGE*	*CRITERIA*	*SIGNIFICANT?*
I-205	West of Eleventh Street	150	75.6	75.7	0.1	+3.0 dB	No
I-205	Between Eleventh Street and Corral Hollow	150	76.2	76.2	0.0	+3.0 dB	No
I-205	Between Corral Hollow and MacArthur Drive	150	77.0	76.9	-0.1	+3.0 dB	No
I-205	East of MacArthur Drive	150	82.1	82.0	-0.1	+3.0 dB	No
I-580	North of Corral Hollow	150	79.1	79.1	0.0	+3.0 dB	No
I-580	South of Corral Hollow	150	77.9	77.8	-0.1	+3.0 dB	No

ROADWAY	SEGMENT	APPROX. RECEPTOR DISTANCE	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
			2045 NO BUILD	2045 WITH BUILD	CHANGE	CRITERIA	SIGNIFICANT?
Grant Line Road	West of Corral Hollow	75	68.1	68.1	0.0	+3.0 dB	No
Grant Line Road	East of Corral Hollow	75	59.6	59.4	-0.2	+5.0 dB	No
Grant Line Road	East of Tracy Boulevard	75	58.1	58.1	0.0	+5.0 dB	No
Grant Line Road	East of Chrisman Road	75	46.6	46.5	-0.1	+5.0 dB	No
Eleventh Street	East of Lammers Road	75	65.1	65.0	-0.1	+3.0 dB	No
Eleventh Street	East of Corral Hollow	75	63.1	63.0	-0.1	+3.0 dB	No
Eleventh Street	East of MacArthur Drive	75	62.8	62.8	0.0	+3.0 dB	No
Schulte Road	West of Corral Hollow	75	59.2	59.0	-0.2	+5.0 dB	No
Schulte Road	East of Corral Hollow	75	61.8	61.7	-0.1	+3.0 dB	No
Schulte Road	East of Tracy Boulevard	75	60.0	60.1	0.1	+3.0 dB	No
Schulte Road	East of MacArthur Drive	75	53.1	54.4	1.3	+5.0 dB	No
Valpico Road	East of Tracy Boulevard	75	56.7	56.7	0.0	+5.0 dB	No
Valpico Road	East of MacArthur Drive	75	58.8	58.9	0.1	+5.0 dB	No
Linne Road	East of Corral Hollow	75	63.2	63.3	0.1	+3.0 dB	No
Linne Road	East of Tracy Boulevard	75	61.8	61.8	0.0	+3.0 dB	No
Lammers Road	South of Byron Rd.	75	47.8	47.7	-0.1	+5.0 dB	No
Lammers Road	South of Eleventh Street	75	49.4	49.3	-0.1	+5.0 dB	No
Lammers Road	North of Valipico Road	75	58.7	58.6	-0.1	+5.0 dB	No
Corral Hollow Road	South of Grant Line Road	75	62.7	62.7	0.0	+3.0 dB	No
Corral Hollow Road	South of Eleventh Street	75	65.2	65.1	-0.1	+3.0 dB	No
Corral Hollow Road	South of Schulte Road	75	61.0	60.9	-0.1	+3.0 dB	No
Corral Hollow Road	North of Valpico Road	75	57.6	57.5	-0.1	+5.0 dB	No
Tracy Boulevard	North of Grant Line Road	75	60.9	61.2	0.3	+3.0 dB	No
Tracy Boulevard	South of Grant Line Road	75	61.8	61.8	0.0	+3.0 dB	No
Tracy Boulevard	North of Eleventh Street	75	61.1	61.2	0.1	+3.0 dB	No
Tracy Boulevard	South of Eleventh Street	75	62.0	62.1	0.1	+3.0 dB	No
Tracy Boulevard	North of Schulte Road	75	58.8	59.1	0.3	+5.0 dB	No
Tracy Boulevard	South of Schulte Road	75	64.1	64.2	0.1	+3.0 dB	No
Tracy Boulevard	South of Valpico Road	75	62.3	62.3	0.0	+3.0 dB	No
MacArthur Drive	South of I-205	75	59.1	59.2	0.1	+5.0 dB	No
MacArthur Drive	South of Grant Line Road	75	61.4	61.3	-0.1	+3.0 dB	No
MacArthur Drive	South of Eleventh Street	75	55.5	55.1	-0.4	+5.0 dB	No
MacArthur Drive	North of Valpico Road	75	51.4	51.4	0.0	+5.0 dB	No
MacArthur Drive	South of Valpico Road	75	54.1	54.2	0.1	+5.0 dB	No
Chrisman Road	South of Eleventh Street	75	61.0	61.4	0.4	+3.0 dB	No
Chrisman Road	South of Schulte Road	75	62.6	62.7	0.1	+3.0 dB	No
Byron Road	West of Corral Hollow Rd.	75	56.3	56.0	-0.3	+5.0 dB	No

ROADWAY	SEGMENT	APPROX. RECEPTOR DISTANCE	NOISE LEVELS (L_{DN}, dB) AT NEAREST SENSITIVE RECEPTORS				
			2045 NO BUILD	2045 WITH BUILD	CHANGE	CRITERIA	SIGNIFICANT?
Corral Hollow Road	North of Grant Line Road	75	58.5	58.5	0.0	+5.0 dB	No
Lammers Road	South of Valpico Road	75	62.3	62.2	-0.1	+3.0 dB	No
Corral Hollow Road	South Valpico Road	75	50.9	50.9	0.0	+5.0 dB	No

SOURCE: FHWA-RD-77-108 WITH INPUTS FROM KIMLEY-HORN AND SAXELBY ACOUSTICS, 2024.

According to Table 3.3-5, the greatest increase due to traffic from the proposed Project is +1.3 dBA, which is less than the minimum significance threshold of +3.0 dBA. Therefore, impacts resulting from increased traffic noise would be considered ***less-than-significant***.

PROJECT-GENERATED NON-TRANSPORTATION NOISE ENVIRONMENT AT OFF-SITE RECEPTORS

The City of Tracy noise level standards require that new projects in the vicinity of existing sensitive receptors generate noise levels no greater than 55 dBA L_{eq}. As shown by Figure 13.2-2, the noise levels for a typical multifamily residential development are not expected to exceed the outlined City of Tracy exterior noise level standards at nearby receptors. Therefore, impacts resulting from operational noise would be considered ***less than significant.***

CONSTRUCTION NOISE

During the construction of the proposed Project, noise from construction activities would temporarily add to the noise environment in the Project vicinity. As shown in Table 3.3-6, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

TABLE 3.3-6: CONSTRUCTION EQUIPMENT NOISE

TYPE OF EQUIPMENT	MAXIMUM LEVEL, DB AT 50 FEET
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in Table 3.3-6, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise from localized point sources (such as construction sites) typically decreases by approximately 6 dBA with each doubling of distance from source to receptor. Given this noise attenuation rate and assuming no noise shielding from either natural or human-made features (e.g., trees, buildings, fences), outdoor receptors within approximately 1,600 feet of construction sites could experience maximum instantaneous noise levels of greater than 60 dBA when on-site construction-related noise levels exceed approximately 90 dBA at the boundary of the construction site.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration and would occur during daytime hours.

During development of future projects, construction activities occurring during the more noise-sensitive late evening and nighttime hours (i.e., 7:00 p.m. to 7:00 a.m.), weekends, and holidays could result in increased levels of annoyance and potential sleep disruption for occupants of nearby existing noise sensitive land uses. Additionally, there are several residential uses directly adjacent to the project site which may be subject to construction noise. As a result, noise-generating construction activities would be considered to have a ***potentially significant*** short-term impact.

The City of Tracy General Plan Noise Element Policy 4 and the Tracy Municipal Code restrict construction noise from the noise ordinance between the hours of 7:00 a.m. and 7:00 p.m. or daylight hours. In addition, Policy 4 requires the following noise control measures:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.

Implementation of the City of Tracy General Plan Policy 4 and Tracy Municipal Code construction noise control measures would reduce construction noise levels. Therefore, construction-related noise impacts would be ***less than significant***.

MITIGATION MEASURE(S)

None required.

SIGNIFICANCE AFTER MITIGATION

Less Than Significant

Impact 3.3-2: The proposed Project has the potential to generate excessive groundborne vibration or groundborne noise levels. (Less than Significant with Mitigation)

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural damage. The primary vibration-generating activities generated by the proposed Project would be grading, utilities placement, and parking lot construction. **Table 3.3-7** shows the typical vibration levels produced by construction equipment.

TABLE 3.3-7: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

TYPE OF EQUIPMENT	*P.P.V. AT 25 FEET (INCHES/SECOND)*	*P.P.V. AT 50 FEET (INCHES/SECOND)*	*P.P.V. AT 100 FEET (INCHES/SECOND)*
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

SOURCE: TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES. FEDERAL TRANSIT ADMINISTRATION. MAY 2006.

With the exception of vibratory compactors, the Table 3.3-7 data indicate that construction vibration levels anticipated for the Project are less than the 0.2 in/sec threshold at a distance of 25 feet. Use of vibratory compactors within 26 feet of the adjacent buildings could cause vibrations in excess of 0.2 in/sec. Because the project does not approve any specific development plans, it is not known how close construction could occur to existing structures. Therefore, this is a ***potentially significant*** impact.

Although not a CEQA issue, it may be possible for residents of the proposed Project to experience some vibration associated with operation of the UPRR railroad tracks adjacent to several of the project locations. Vibration associated with passing trains is not expected to cause undue impact to future residents of the proposed Project, nor cause damage to proposed buildings.

MITIGATION MEASURE

Mitigation Measure 3.3-2: *Any compaction required less than 26 feet from adjacent structures should be accomplished by using static drum rollers which use weight instead of vibrations to achieve soil compaction. As an alternative to this requirement, pre-construction crack documentation and*

construction vibration monitoring could be conducted to ensure that construction vibrations do not cause damage to any adjacent structures.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure 3.3-2 would reduce construction vibration levels at adjacent structures to below the 0.2 in/sec threshold. Therefore, this would be a ***less-than-significant*** impact.

Impact 3.3-3: The proposed Project is located within two miles of Tracy Municipal Airport and would not expose people residing or working in the Project area to excessive noise levels. (Less than Significant)

Based upon Figure 3.3-1, the proposed housing rezone sites are located outside of the predicted 55 dBA CNEL noise contour of the Tracy Municipal Airport. According to the City of Tracy General Plan Land Use Compatibility Chart, the noise environment of the proposed project is considered normally acceptable.

Therefore, the Project would have a ***less-than-significant*** impact related to airports and airport noise.

MITIGATION MEASURE

None required.

SIGNIFICANCE AFTER MITIGATION

Less Than Significant

CUMULATIVE IMPACTS

The cumulative context for noise impacts consists of the existing and future noise sources that could affect future surrounding uses.

Impact 3.3-4: The proposed Project, combined with cumulative development, would not expose existing noise-sensitive land uses to increased noise. (Less than Significant)

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways and on-site activities resulting from the operation of future development on the rezone sites. Table 3.3-2 shows cumulative traffic noise levels with and without the proposed rezone sites.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours. The cumulative noise would be fairly small and would not be substantial in a future noise environment.

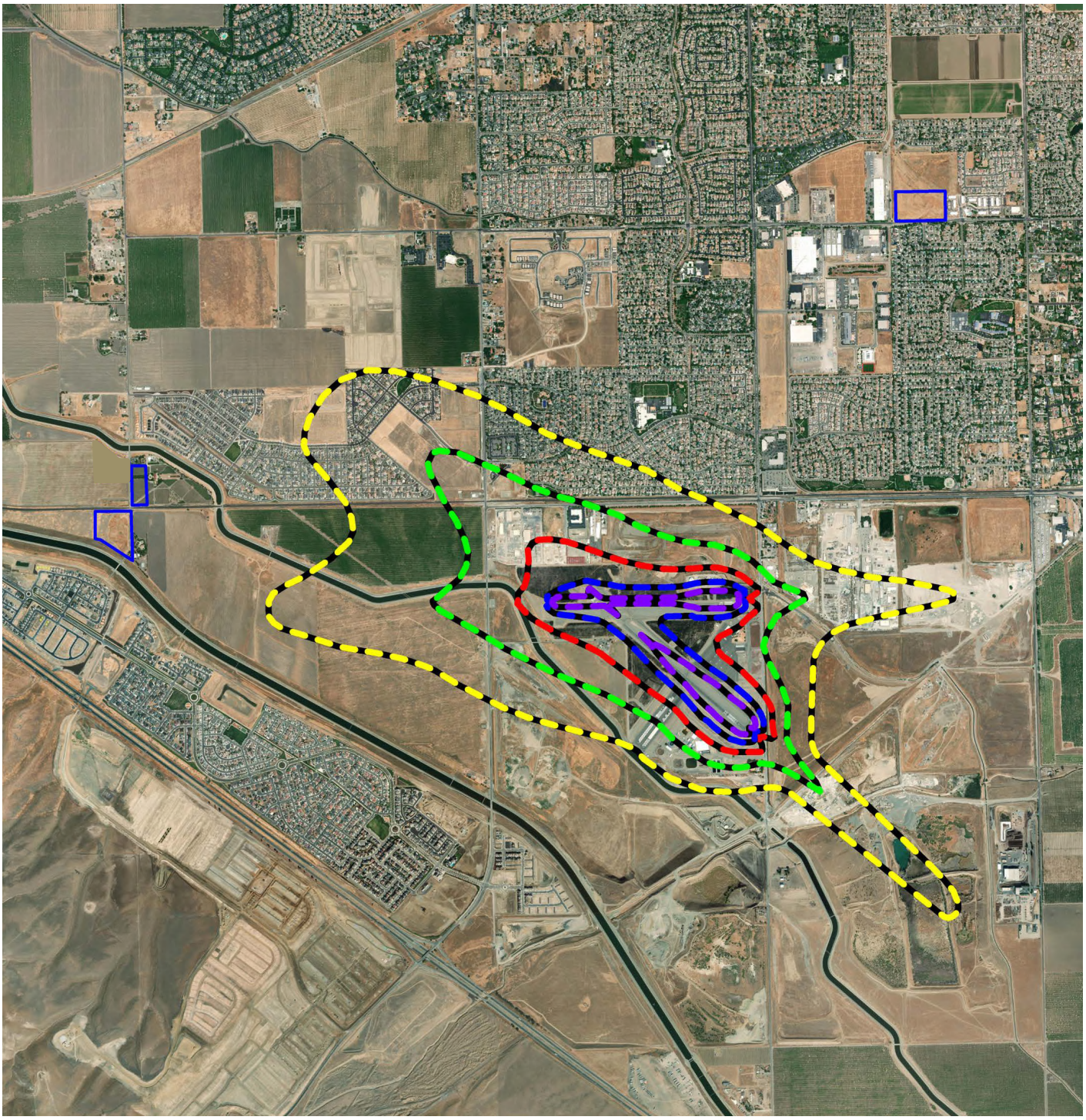
The proposed rezone, when considered alongside all past, present, and probable future projects, would not be expected to cause any significant cumulative construction noise impacts. The proposed Project would not have cumulatively considerable impacts associated with construction noise. Cumulative traffic noise levels would not be expected to cause significant traffic noise impacts. Therefore, the cumulative impact of noise on sensitive receptors would be ***less than significant***.

MITIGATION MEASURE

None required.

SIGNIFICANCE AFTER MITIGATION

Less Than Significant



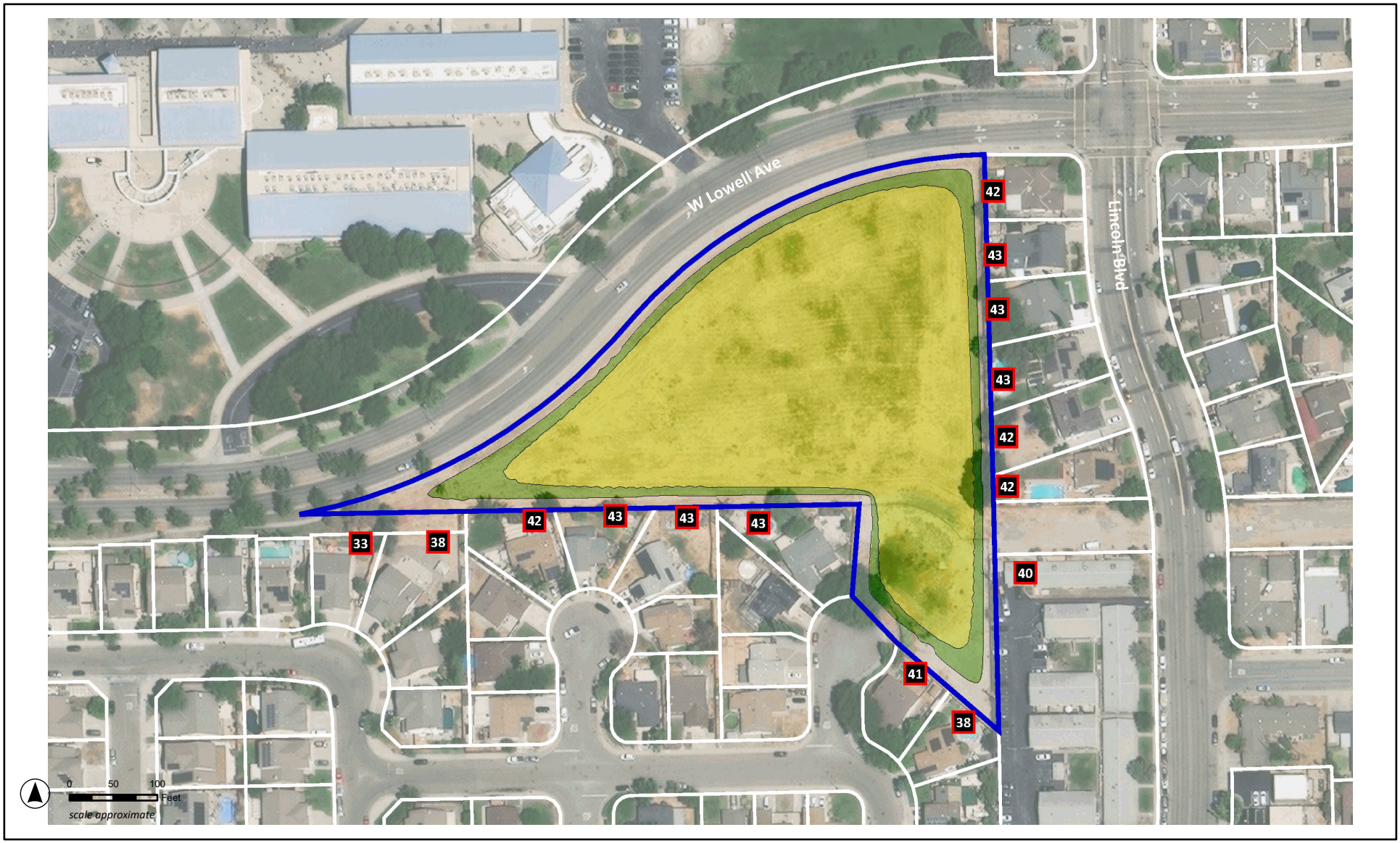
Legend

- Rezone Parcel
- Noise Contour - 55 dBA
- Noise Contour - 60 dBA
- Noise Contour - 65 dBA
- Noise Contour - 70 dBA
- Noise Contour - 75 dBA

Source: Saxelby Acoustics. Map date: December 8, 2025.

Figure 3.3-1.

Airport Noise Contours and Rezone Parcels within Two Miles



Legend

Example Rezone Site

X Noise Level

Noise Level (Leq, dBA)

- <=50
- >50 - 51
- >51 - 52
- >52 - 53
- >53 - 54
- >54 - 55
- >55

Figure 3.3-2.

Example Operational Noise Levels (dBA, Leq)

Source: Saxelby Acoustics. Map date: December 1, 2025.

This section analyzes the potential impacts of the proposed Project on the transportation system. This section identifies the potential transportation impacts of future buildout of the Project and recommends mitigation measures to lessen their significance.

Sources used in the preparation of this chapter include the Transportation Analysis Memorandum prepared by Kimley Horn and Associates, Inc. (November 2025). In addition, local planning documents were referenced including the City of Tracy General Plan (February 2011), the City of Tracy General Plan Environmental Impact Report (October 2005), and the Citywide Roadway & Transportation Master Plan (August 2022).

No transportation-related comments were received during the Notice of Preparation (NOP) comment period. Full comments received are included in Appendix B.

3.4.1 ENVIRONMENTAL SETTING

REGIONAL CONTEXT

The City of Tracy is located in San Joaquin County east of the Coastal Range that separates California's Central Valley from the San Francisco Bay Area. The City lies 68 miles south of Sacramento and 60 miles east of San Francisco. Tracy is situated within a triangle created by the intersection of several Interstate highways including I-205, I-580, and I-5.

The City is surrounded primarily by agricultural land to the north, south, and east. The community of Mountain House lies to the northwest. Agricultural and industrial land are to the west of the city. The Carnegie State Vehicular Recreation Area (SVRA) is southwest of the City.

Existing Roadway Network

This section describes the physical characteristics of the primary roadway network within and serving the City of Tracy. The following roadway network information is from the City of Tracy General Plan EIR and the City of Tracy Citywide Roadway & Transportation Master Plan.

FREEWAYS

The following freeway information is from the City of Tracy General Plan EIR. Regional access to the City is provided via Interstate 205 (I-205), Interstate 580 (I-580), and Interstate 5 (I-5).

I-205 extends from I-580 to I-5 and extends east-west through the northern portion of the city. Interchanges are provided at West Eleventh Street, Grant Line Road, Tracy Boulevard, and MacArthur Drive. West of Eleventh Street, I-205 has six lanes. Construction is underway to widen the remaining I-205 sections east of Eleventh Street from four lanes to six lanes. The posted speed limit on I-205 is 70 miles per hour.

I-580 extends from the San Francisco Bay Area, through the Altamont Pass, and connects to I-5 south of Tracy. This facility has four lanes in the segments adjacent to the city with a posted speed limit of 70 miles per hour.

I-5 is a major roadway that extends north-south throughout the State of California. In San Joaquin County, I-5 connects Tracy with the cities of Stockton, Lathrop and Manteca. Those sections adjacent to the City of Tracy have four travel lanes with a posted speed limit of 70 miles per hour.

ARTERIAL STREETS

Arterials provide regional connectivity and relatively unimpeded traffic flow for both passenger cars and commercial vehicles (City of Tracy, 2022). These facilities have high vehicle capacities and support high travel speeds. Access to arterials is limited by intersection spacing and driveway locations. Arterials can be classified as either major or minor arterials. Major arterials are designed to provide major routes within the City and to regional facilities. Major arterials have access points that are spread out approximately every mile. Traffic volumes along major arterials can be as high as 50,000 vehicles per day. Minor arterials provide some direct access to shopping centers and large residential communities. Access to minor arterials is more frequent than major arterials (approximately every half mile). Traffic volumes along minor arterials range from 10,000 to 30,000 vehicles per day. Arterials within the City of Tracy include Grant Line Road, Eleventh Street, Schulte Road, Valpico Road, Corral Hollow Road, Tracy Boulevard, and MacArthur Drive.

COLLECTOR STREETS

Collectors are designed to provide connectivity between local roadways and the higher capacity arterial facilities (City of Tracy, 2022). Collectors also provide direct access to business and residential properties (approximately every quarter mile). High vehicle capacities and moderate travel speeds are supported by collectors. Collectors can be classified as either major or minor. Major collectors support higher volumes and higher speeds than minor collectors but have more limited access. Collectors have traffic volumes that range from 2,000 to 10,000 vehicles per day.

RESIDENTIAL STREETS

Residential streets support low traffic volumes and slow travel speeds (City of Tracy, 2022). These streets provide direct access to properties and connect to the roadway network. Design guidelines of these roadways are implemented to minimize travel speed, promote pedestrian safety, and prohibit cut through traffic. Access locations are generally very close together on residential streets (approximately 500 foot spacing).

INDUSTRIAL STREETS

Industrial streets are designed to provide access to industrial and commercial land uses such as shopping centers, office parks, and industrial parks (City of Tracy, 2022). These roadways are designed to allow access for truck traffic.

TRANSIT SERVICE

The City of Tracy operates fixed-route bus and paratransit services with the TRACER bus system. Additionally, San Joaquin Regional Transit District (SJRTD) operates several routes that pick-up passengers in Tracy. Further, Altamont Commuter Express (ACE) operates commuter trains from San Jose to Stockton, stopping in Lathrop/Manteca, Tracy, Livermore, Pleasanton, Fremont, and Santa

Clara before reaching San Jose. The services are described below. The fixed routes all operate in central Tracy, and do not extend into the study area.

TRACER Bus Services

TRACER Fixed Route bus transit service operated and managed by the City of Tracy. TRACER Fixed Route service offers eleven routes to that connect riders to places like Downtown Tracy, Prime Outlets, West Valley Mall, Wal-Mart, including commuter routes with morning and afternoon service to most local schools. TRACER Fixed-Route bus service is available Monday through Friday from approximately 7:00am to 7:00pm and Saturdays from 9:00am to 7:00pm. All TRACER buses are ADA accessible. Figure 3.4-1 shows the Tracer routes within the study area.

The one-way cash fare for the TRACER fixed route service is $1.25 for adults, discounted to $1.00 for students and $0.50 for seniors and the disabled. Additionally, day passes offering unlimited trips in a single day are available for $3.00 for adults ($2.50 for students, $1.25 for seniors and the disabled) as are 10-ride tickets and weekly passes for $12.50 ($10.00 for students, $5.00 for seniors and the disabled).

The TRACER Paratransit service area incorporates most of the City of Tracy and is generally bounded by Lammers Road to the west, Larch Road and Arbor Avenue to the north, and Chrisman Road to the east. Service is available during the fixed route TRACER service. One-way rides are $1.50 for seniors, disabled individuals, and those on Medicare, and the cash fare increases to $1.75 for the general public living in unincorporated areas and guests and companions of paratransit users. The Paratransit Subsidized Taxi Service is available to TRACER Paratransit users during non-operating hours.

Altamont Commuter Express (ACE)

The ACE in Tracy is located on the northeast corner of the intersection of West Linne Road and Tracy Boulevard. See Figure 3.4-2 for the ACE routes within the study area. In service Monday through Friday, ACE offers three trains in the AM peak period operating from 4:10 a.m. to 7:32 a.m. and three trains during the PM period, operating from 5:11 pm. to 8:14 p.m. ACE does not run on the weekends.

Monthly, weekly, 20-trip, and one-way passes are available and vary in price based on distance traveled. Adult fares range from $6.25 for a one-way trip ($161.25 monthly pass) from Tracy to Tri-Valley to $11.75 for a one-way trip ($299.75 monthly pass) from Tracy to San Jose.

San Joaquin Regional Transit District (SJRTD)

SJRTD provides intercity fixed route service between Tracy and Stockton. See Figure 3.4-3 for the SJRTD routes within the study area. As of January 1, 2012, a one-way fare on an RTD costs $1.50 ($0.75 discounted for seniors or Medicate card-holders). One-day passes are available for $4.00 ($2.00 discounted), and 31-day passes are available for $65.00 ($40.00 for students, $30.00 discounted). Additionally, the RTD-BART Commuter service costs $7.00 each way with monthly fares

ranging from $132.00 to $144.00 depending on destination and origin. SJRTD operates the following routes in Tracy:

- **Route 90** — runs from Stockton's Downtown Transit Center along 1-5 to Tracy, where it runs east-west along Grant Line Road, ending at the Wal-Mart just west of I-205. Route 90 operates on weekdays from 5:27 AM to 8:22 PM.
- **Route 150 (RTD-BART Commuter)** — runs from Stockton's Downtown Transit Center to the Dublin BART. The route operates from 4:00 AM to 7:20 PM on weekdays.

PEDESTRIAN AND BICYCLE FACILITIES

This section describes the existing pedestrian and bicycle facilities in the vicinity of the Project site.

Existing Pedestrian Facilities

The City of Tracy is pedestrian friendly with widespread sidewalk coverage and pedestrian crossings with Americans with Disabilities Act (ADA) ramps along major roadways and in residential neighborhoods. The sidewalk coverage helps to promote walking and provides pedestrians access to destinations throughout the City. the City has critical gaps in sidewalk coverage. These gaps include a segment along Corral Hollow Road south of Schulte Road and along Tracy Boulevard south of Valpico Road. In addition to the critical gaps, ADA routes (an ADA Transition Plan) have not been established along the existing sidewalks to specific destinations in the City.

Bicycle Facilities

Bicycle facilities in Tracy include the following general types:

- **Class I: Shared Use Path** - Referred to as shared-use paths or trails, these are off-street facilities that provide exclusive use for non-motorized travel, including bicyclists and pedestrians. Bike paths have minimal cross flow with motorists and are typically located along landscaped corridors.
- **Class II: Bicycle Lane** - Bicycle lanes provide a restricted right-of-way and are designated for the use of bicycles for one-way travel with a striped lane on a street or highway. Bicycle lanes are generally a minimum of five feet wide. Vehicle parking and vehicle/pedestrian cross-flow are permitted.
- **Class III: Bicycle Route** - These facilities are found along streets that do not provide sufficient width for dedicated bicycle lanes. The street is designated as a bicycle route through the use of signage and optional pavement markings where bicyclists travel on the shoulder or share a lane with motor vehicles. Class III bike routes are utilized on low-speed and low-volume streets to connect bike lanes or paths along corridors that do not provide enough space for dedicated lanes.
- **Class IV: Separated Bikeway** - Commonly known as cycle tracks, these are physically separated bicycle facilities that are distinct from the sidewalk and designed for exclusive use by bicyclists. They are located within the street right-of-way, but provide comfort similar to Class I bike paths.

Bicycle facilities in the study area are similar to the pedestrian facilities in the Planning Area. Street frontages that contain recent development have complete sidewalks and bicycle lanes, while areas undeveloped generally lack pedestrian facilities and dedicated bicycle facilities. The City of Tracy has an extensive bicycle network. The current bicycle network is shown in Figure 3.4-4.

3.4.2 REGULATORY SETTING

Existing transportation polices, laws, and regulations that would apply to the Project are summarized below. This information provides a context for the impact discussion related to the Project's consistency with applicable regulatory conditions and development of significance criteria for evaluating Project impacts.

STATE

Senate Bill 743

SB 743 added section 21099 to the Public Resources Code, which states that automobile delay, as described by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment. The law directed OPR to amend the CEQA Guidelines to establish new metrics for determining the significance of transportation impacts of projects. The California Natural Resources Agency certified and adopted the amended CEQA Guidelines in December 2018. In the amended CEQA Guidelines, OPR selected VMT as the preferred transportation impact metric and applied its discretion to recommend use of VMT statewide, beginning in July 2020. The amended CEQA Guidelines state that "generally, VMT is the most appropriate measure of transportation impacts."

California Department of Transportation

Caltrans is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS). Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the SHS within the study area would need to be approved by Caltrans.

LOCAL

City of Tracy Citywide Roadway & Transportation Master Plan

The City released the Final Draft Transportation Master Plan Update in August 2022. This document serves as an update to the 2012 City of TMP. The TMP builds upon the goals and objectives as defined in the Circulation Element of the City's General Plan (February 2011) and the Sustainable Action Plan (SAP) (February 2011). The SAP included feasible measures to achieve sustainability in multiple sectors and reduce GHG emissions. These measures include policies to increase transit usage and opportunities, improve traffic flow in the city, support the development of new bicycle and pedestrian facilities, and other land use policies. The General Plan is based upon a future Horizon Year of 2025 conditions. The TMP looks to a Horizon Year of 2042, to provide the maximum possible infrastructure planning and to be consistent with the planned San Joaquin Council of Governments

(SJCOG) Travel Demand Model update to Year 2042. The TMP provides a complete review of the City's transportation system and serves as a comprehensive planning document that can be utilized to identify and implement required improvements to the existing roadway system. In addition, the TMP can serve as the baseline for incorporating expansion or accommodating future development consistent with the General Plan.

According to the Plan, if a significant transportation impact is identified, feasible mitigation measures to avoid or reduce the impact must be identified. CEQA requires that mitigation measures are included in the project's environmental assessment. OPR provides a list of potential measures to reduce VMT but gives the lead agency (the City of Tracy in this case) full discretion in the selection of mitigation measures.

The type and size of the project will determine the most appropriate mitigation strategies for VMT impacts. For large projects such as general plans or specific plans, VMT mitigations should concentrate on the project's density and land use mix, site design, regional policies, and availability of transit, bicycle, and pedestrian facilities. For smaller projects such as an individual development project, VMT mitigations will typically require the preparation of a transportation demand management (TDM) program. A TDM program is a combination of strategies to reduce VMT. The program is created by an applicant for their land use project based on a list of strategies agreed to with the City of Tracy.

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to transportation and circulation. General Plan policies applicable to the Project are identified below:

POLICIES: CIRCULATION

- CIR-1.1-P1. The City should develop context-based street designs that allow for variations based on the expected function and location of the facility, and the surrounding land use context. These context-sensitive designs should have the following aims:
    - Create aesthetically attractive streetscapes.
    - Enhance multi-modal transportation by increasing mobility and improving safety for autos, trucks, transit, pedestrians, and bicyclists.
- CIR-1.1-P2. The City shall preserve rights-of way needed for future roadway and freeway interchange improvements through dedication or acquisition as adjacent properties develop or redevelop.
- CIR-1.1-P3. The City shall continue to apply traffic mitigation fee programs to fund transportation infrastructure, based on a fair share of facility use.
- CIR-1.1-P4. The City should continue to pursue regional, county, and State funding to fund roadway projects. These potential funding sources may include Measure K sales tax revenues, a regional or countywide transportation impact fee, and other existing and future revenue sources.

- CIR-1.1-P5. The City shall continue to participate in regional transportation funding decisions, including Measure K reauthorization, regional or countywide transportation fees, and prioritization of State funded projects.
- CIR-1.1-P6. The Roadway Master Plan update shall identify necessary improvements to various intersections on I-205 and I-580 based on land use designations and with particular attention to Terminal Access Routes in accordance with Surface Transportation Assistance Act of 1982 (STAA).
- CIR-1.2-P1. The City shall ensure that the street system results in a high level of connectivity, especially between residences and common local destinations, such as schools, Village Centers, retail areas, and parks. The standard for roadway (vehicular) connectivity is defined as appropriate spacing of arterials and collectors and local roads as detailed in Section of [the Circulation] Element "Roadway Classifications and Standards".
- CIR-1.2-P2. The City shall implement a connected street pattern with multiple route options of vehicles, bikes, and pedestrians.
- CIR-1.2-P3. New development shall be designed to provide vehicular, bicycle and pedestrian connections with adjacent developments.
- CIR-1.2-P5. New development shall be designed with a grid or modified grid pattern to facilitate traffic flows and to provide multiple connections to arterial streets.
- CIR-1.3-P7. Traffic studies for new developments within the City may be prepared if necessary and appropriate to determine the impacts of the project's traffic on the transportation system.
- CIR-1.3-P8. Access control and minimization of median openings shall be a key consideration in the design of expressways, boulevards, arterials, and major collectors.
- CIR-1.3-P9. The City shall encourage the use of right-turn-in/right-turn-out only turning movements where local and collector streets intersect arterial streets with medians. The purpose is to increase the safety of the roadway and to avoid traffic signals that are spaced too close together.
- CIR-1.6-P2. New development shall implement traffic calming measures where necessary so long as connectivity is not diminished.
- CIR-3.1-P6. New development shall include pedestrian and bicycle facilities internal to the development and that connect to city-wide facilities, such as parks, school, and recreational corridors, as well as adjacent development and other services.
- CIR-3.1-P7. New development sites for commercial, employment, educational, recreational, and park-and-ride land uses shall provide bicycle parking and/or storage facilities.
- CIR-4.1-P5. The City shall require development to provide for transit and transit-related increased modal opportunities, such as adequate street widths and curb radii, bus turnouts, bus shelters, park-and-ride lots and multi-modal transit center through the development and environmental review processes, if appropriate.

3.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project will have a significant impact on transportation and circulation if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and/or
- Result in inadequate emergency access.

Vehicle Miles Traveled (VMT) Analysis

With the passage of SB 743 in 2013, and especially since 2020 when Level of Service (LOS) was eliminated as a CEQA threshold for a significant transportation impact, vehicle miles traveled (VMT) has become an important indicator for determining if new development will result in a significant transportation impact. Based on the land use forecasts developed for the Project, and for the purposes of SB 743 analysis and the determination of transportation-related significant impacts, the following major land uses were analyzed:

- Residential land uses
- Employment-based land uses

The primary basis for analysis was the City of Tracy Travel Demand Model (Tracy Model) which incorporates elements of San Joaquin Council of Government's (SJCOG's) 2018 and 2022 Regional Transportation Plan (RTP) travel demand model, along with refined roadway network and land use detail for the City of Tracy and its sphere-of-influence (SOI), consistent with the current draft TMP. The Tracy Model served as the primary tool for calculating VMT across all land uses and scenarios. Both the Baseline (2024) and Future Year (2046) versions of the travel demand model were employed to determine the VMT impacts of the land uses across on the surrounding roadway network for the following analysis scenarios:

- *Baseline* – 2025 land use in the incorporated and unincorporated areas in the County
- *2046 No Build Conditions* – 2046 land uses in the incorporated and unincorporated areas based on the RTP in the County, excluding Land Use updates within the City of Tracy Sphere of Influence (SOI)
- *2046 Buildout Conditions* – 2046 land uses in the incorporated and unincorporated areas based on the RTP in the County, including Land Use updates within the City of Tracy SOI.

City of Tracy VMT Thresholds of Significance

SB 743 is an effort by the California legislature to improve California's sustainability and reduce greenhouse gas emissions through denser infill development, a reduction in single occupancy

vehicles, improved mass transit, and other actions. VMT is widely accepted as a reliable proxy for evaluating greenhouse gases (GHG) and other transportation-related impacts that the State is actively trying to address.

In January 2019, the California Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines' changes were approved by the Office of Administrative Law and are now in effect. Specific to SB 743, CEQA Guidelines Section 15064.3(c) states, "The provisions apply statewide as of July 1, 2020." To aid lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR) produced a VMT Analysis Guidelines document that included detailed guidance about the variety of implementation questions they face with respect to shifting to a VMT metric.

This SB 743-compliant analysis was performed for the proposed Project based on guidelines established by the City of Tracy, for determination of potential VMT related transportation impacts caused by the Project to the surrounding area. Note that the City's guidelines are consistent with those recommended by OPR. The City's VMT thresholds consider the VMT performance of residential and non-residential components of a project separately, using the efficiency metrics of VMT per capita and VMT per employee, respectively. The City's VMT thresholds of significance are summarized below for each of these components:

- *Residential* – 15% below baseline (existing) average VMT per capita for San Joaquin County.
- *Employment-based land uses (e.g., office)* – 15% below baseline (existing) average VMT per employee for San Joaquin County

METHODOLOGY AND ASSUMPTIONS

This section describes the analysis methods and assumptions used to determine impacts associated with transportation and circulation as defined by CEQA that would result from implementation of the Project.

Land Use Inputs

The following is a summary of project specific considerations related to the analysis of the Project:

- The Tracy Rezone Program has identified a targeted rezoning program to address the unit shortfall for the 6th Cycle Housing Element RHNA for the City. This program encompasses approximately 240 acres and would accommodate 6,616 units.
- Buildout of the General Plan could result in a growth of up to 31,434 dwelling units and 67,283 jobs compared to existing (2025) conditions.
- The most recent SJCOG 2022 RTP travel demand model features land use predictions for a range of analysis years including 2025 and 2046. Thus, for 2025 land use approximations outside of the Tracy SOI, values were taken based on these datasets. For the Tracy SOI land use specifically, land use information in the Tracy Model was

updated to current conditions based on the data provided by the City's General Plan consultant.

The Tracy Model provides land uses based on residential and employment classifications. Employment classifications are broken into seven categories that group together various industries based on similar trip-making characteristics. **Table 3.4-1** shows the cross-reference between the North American Industry Classification System (NAICS) industries and the model employment categories.

TABLE 3.4-1: SJCOG RTDM EMPLOYMENT CATEGORIES

CATEGORY	*DESCRIPTION AND NAICS CODES*
EMPEDU	Educational Services (61-63)
EMPFOO	Accommodations (721), Food Services (722), Arts, Entertainment and Recreation (71)
EMPGOV	Public Administration (92)
EMPIND	Utilities (22), Construction (23), Other Services Except Public Administration (81), Wholesale Trade (42), Transportation and Warehousing (48-49)
EMPMED	Health Care and Social Assistance (62)
EMPOFC	Information (51), Finance and Insurance (52), Real Estate, Rental and Leasing (53), Professional, Scientific, and Technical Services (54), Management of Companies and Enterprises (55), Administrative/Support, Waste Management & Remediation (56)
EMPOTH	Mining, Quarrying, Oil and Gas Extraction (21), Manufacturing (31-33)
EMPRET	Retail Trade (44-45)
EMPAGR	Agriculture, Forestry, Fishing and Hunting (11)

SOURCE: KIMLEY HORN, NOVEMBER 2025.

Roadway Network Assumptions

Within the Tracy SOI, Kimley-Horn updated the Tracy Model's baseline and future year roadway network based on the current data available for the City of Tracy SOI and anticipated roadway network improvements included in the 2022 Draft City of Tracy Transportation Master Plan (TMP) and anticipated to be included in the future 2025 TMP. Outside of the Tracy SOI, the roadway network was updated in accordance with the current SJCOG Regional Transportation Plan and Sustainable Communities Strategy. The land use and roadway network modifications were based on the City's approved projects/developments including Cordes Ranch, Tracy Hills, Stringer, Grant Line Apartments, Harvest Apartments, Tracy Village, Pescadero, and Ellis. As the roadway network updates to the Tracy Model were focused on existing and future roadway network changes within the City of Tracy SOI, including the City's current Citywide Roadway and Transportation Master Plan, areas outside the Tracy SOI remained unchanged from what had already been established for the respective analysis year. Finally, the updates to the Tracy Model include roadway network enhancements consistent with the recent Caltrans' Interstate I-205 Managed Lanes Project. Residential and Employment-based Land Uses Analysis

The VMT for the residential land uses was computed by combining the production VMT for all Home-Based trip purposes included in the Tracy Model. Production VMT refers to the total distance traveled for all trips that start from home, including commute trips, shopping trips, and other activities such as dropping children off at school. Likewise, VMT for non-residential land uses was computed based on the attraction Home-Based Work trips included in the Tracy Model. Attraction Home-Based Work VMT measures the total distance traveled for trips that end at workplaces, starting from home. Residential and employment-based VMT per capita and VMT per employee, respectively, for each TAZ were computed by dividing the residential and non-residential VMT by TAZ by the total population or total employees.

Table 3.4-2 summarizes the VMT evaluation across the analysis scenarios, as well as the City's calculated residential and employment VMT per capita and VMT per employee thresholds. The thresholds were determined by setting them 15-percent lower than the baseline countywide average VMT per capita and baseline countywide average VMT per employee, consistent with the City's VMT analysis guidelines. The baseline countywide average for VMT per capita is 19.5 VMT, and the baseline countywide average VMT per employee is 25.5 VMT. As shown in Table 3.4-2, the thresholds were calculated to be 16.6 VMT per capita for residential uses and 21.6 VMT per employee for employment uses.

TABLE 3.4-2: VEHICLE MILES TRAVELED (VMT)

JURISDICTION	*2045 NO BUILD*		*2045 BUILDOUT*	
	VMT/CAPITA	*VMT/EMPLOYEE*	*VMT/CAPITA*	*VMT/EMPLOYEE*
Threshold	**16.6**	**21.6**	**16.6**	**21.6**
Tracy SOI	17.5	13.0	15.3	13.4
(% Threshold)	105.42%	60.19%	92.17%	62.04%
Over Threshold?	**Yes**	**No**	**No**	**No**

SOURCE: KIMLEY HORN, NOVEMBER 2025.

The 2046 No Build scenario resulted in a VMT per capita of 17.5 and a VMT per employee of 13.0. The 2046 Buildout scenario resulted in a VMT per capita of 15.3 and VMT per employee of 13.4. Notably, only the No Build scenario exceeds the VMT threshold for residential land uses, and neither scenario exceeds the VMT threshold for employment-based land uses. It should be noted that the VMT per capita value is reduced by 2.2 VMT per capita between the 2046 No Build and the 2046 Buildout scenarios for residential uses. However, the VMT per employee value is increased by 0.4 VMT per employee between the 2046 No Build and 2046 Buildout scenarios for employment uses. As such the Project yields lower VMT per capita and a higher VMT per employee for the Build scenario compared to the No Build scenario.

Table 3.4-3 breaks down VMT per employee by employment type for 2046, under No Build and Buildout scenarios. The 2046 Buildout scenario shows an increase in VMT across all employment types. No employment types across either scenario exceeds their VMT thresholds.

TABLE 3.4-3: VEHICLE MILES TRAVELED (VMT) PER EMPLOYEE BY EMPLOYMENT TYPE

JURISDICTION	*EMPEDU*	*EMPFOO*	*EMPGOV*	*EMPIND*	*EMPMED*	*EMPOFC*	*EMPOTH*	*EMPRET*	*EMPAGR*
Threshold	**9.4**	**18.7**	**35.9**	**25.4**	**18.7**	**36.4**	**9.4**	**12.2**	**11.7**
2045 No Build	5.5	10.7	22.0	14.7	10.8	14.6	4.1	8.3	4.2
2045 Buildout	5.6	11.2	22.7	15.1	11.1	15.0	4.2	8.7	4.3
Over Threshold?	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**	**No**

SOURCE: KIMLEY HORN, NOVEMBER 2025.

Multimodal Methodology

The impact of the proposed housing units was assessed based on their proximity to transit facilities, bikeway and pedestrian facilities. This included a specific focus on changes within a half-mile radius, and bikeway and pedestrian connections to those sites. In order to conduct this evaluation, buffer zones were first created from transit station data obtained from GTFS (General Transit Feed Specification) and system maps, while bike paths and pedestrian facilities were identified from published bikeway/trail maps. The resulting buffer zones were then compared to the proposed Rezone Program Update, which identifies the location of new housing units throughout the City.

GTFS DATA

GTFS data provides information about public transportation schedules and associated geographic information. The following steps are taken to collect and prepare GTFS data:

- Download GTFS Data: Obtain the latest GTFS feed for the City of Tracy's transit system.
- Extract Relevant Data: Extract stop locations, routes, and schedules from the GTFS feed.
- Convert to Spatial Data: Convert the GTFS stop locations into a spatial format (e.g., shapefiles or geodatabases) suitable for analysis in a GIS environment.

SYSTEM AND TRAIL MAPS

System and Trail maps provide additional context and accuracy for transit routes and stop locations as GTFs data might occasionally be inaccurate. The following steps are taken:

- Acquire Maps: Obtain the most recent system maps from the City of Tracy's transit authority and relevant transportation plan.
- Reference Maps: Reference the system maps to align with the spatial data extracted from the GTFS feed.

NETWORK ANALYSIS

1) Setting Up the Network Dataset

To perform network analysis, a network dataset is required. The following steps outline the creation and setup:

- Create Network Dataset: Using GIS software, create a network dataset from the City's street and transit network data.

- Incorporate Data: Integrate the GTFS stop locations and routes, and bikeways into the network dataset.
- Configure Network Analyst: Set up the Network Analyst tool within the GIS software to recognize transit stops and routes.

2) Buffer Zone Creation

Buffer zones are created to represent areas within a specific distance from transit stations and bikeways. The following steps are performed:

- Define Buffer Distance: Establish a buffer distance of a half-mile (0.5 miles) around each transit station.
- Generate Buffers: Create buffer zones around each transit station. This involves calculating the network distance and straight-line distance to account for actual travel paths.

3) Spatial Analysis

The proximity of proposed housing units to transit stations is analyzed as follows:

- Overlay Analysis: Overlay the buffer zones with the proposed housing unit locations.
- Identify Impacted Units: Identify housing units that fall within the half-mile buffer zones around transit stations.
- Impact Assessment: Assess the impact of the proposed housing units based on their proximity to transit stations and bikeways. Units within the half-mile buffer zones are considered to have no impact on transit accessibility and bikeways.

IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Implementation of the proposed Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities (Less than Significant)

No specific development projects are proposed as part of the Project. Kimley Horn conducted a multimodal assessment on whether the proposed Project would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, bicycle, and pedestrian facilities.

TRANSIT FACILITIES

Figure 3.4-5 provides a map of the transit overlay analysis. The multimodal assessment determined all rezoned locations except the following would be within a half-mile of the City's existing transit stops:

- The developments located a half-mile west of the intersection of Eleventh Street and S Lammers Road, bordered by Eleventh Street to the north and undeveloped land to the south.

- The developments located approximately a half-mile west of S Lammers Road and over a half-mile south of Eleventh Street.

Most new residents would have the option to take transit to work or non-work destinations as shown in Figure 3.4-5. Additionally, the proposed Project is not expected to result in any adverse effects on any existing transit facilities. Therefore, this impact would be ***less than significant***.

BICYCLE AND PEDESTRIAN FACILITIES

Figure 3.4-6 provides a map of the bicycle overlay analysis. As shown, all of the Project housing units as identified in the Rezone Program Update would be located within a half-mile of bicycle facilities. Developments that occur under the Rezone Program are expected to comply with city design and guidelines to provide pedestrian access that ensures high connectivity within the City of Tracy. This includes the implementation of sidewalks, crosswalks, and other pedestrian-friendly infrastructure that links residential areas with others. The overlay analysis and the assessment of the proposed project demonstrate alignment with Tracy's goals and policies for pedestrian connectivity. The Buildout conditions align with the SJCOG RTP performance metrics by promoting development within a half-mile of transit stations, thereby enhancing pedestrian access to transit which is consistent with the Short-Range Transit Plan. Therefore, this impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.4-2: Implementation of the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT). (Significant and Unavoidable)

The following VMT analysis is based on the CEQA Transportation Analysis Memorandum prepared by Kimley Horn (See Appendix D for further detail).

VMT ANALYSIS AND FINDINGS

The Project anticipates the development of a multitude of sites throughout the city. Due to the general nature of the Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that would reduce VMT for specific projects as part of this analysis. The significant VMT impacts identified in Table 3.4-2, shows the VMT for implementation of the entire Project. Individual sites included in the Project may or may not exceed the threshold of significance and they may include site-specific project elements or mitigation measures that reduce VMT to below the threshold of significance. As such the significant impacts identified in Table 3.4-2, are unavoidable given known current feasible

mitigation options. As there will undoubtedly be mitigation applied at the project level, the findings of Table 3.4-2 should be considered a worst-case scenario.

There are a multitude of VMT-reducing design principles, policies, and improvements which may ultimately mitigate and/or potentially reduce the VMT impacts outlined in this evaluation in the future. However, the potential VMT-reducing approaches cited in this section would require further planning and development, as well as committed funding sources including those from participants in the development community (many of which may not be identified yet as large areas of land may be further subdivided into specific projects and development). However, these strategies remain vital when interpreting the outcomes of this VMT assessment, and where relevant, they should be incorporated in future VMT evaluations within the City.

VMT Reducing Design Principles

Project design features that reduce VMT can potentially lower the overall VMT of the project. Considerations include:

- Compactness of design/Transit Oriented Development
- A range of housing options
- Incorporation of mixed uses
- Walkable community
- A variety of transportation options
- The preservation of open space

As the Tracy Model does not inherently cater to the effects of several design principles detailed and the precise characteristics, location, and timeline of these VMT-reducing strategies are uncertain, the additional impact of these design elements will necessitate assessment at the specific project level. However, it is crucial to understand that these factors will significantly influence the analysis of individual development projects, though the extent will depend on the chosen location and design features.

VMT Reducing Policies and Improvements

There are several policies and program that can afford opportunities for VMT mitigation including:

- Transportation Demand Measures
- 2046 Regional Transportation Plan & the Sustainable Communities Strategy
- Participation in a VMT Bank
- VMT Reducing Design Principles

Option 1: Transportation Demand Measures.

VMT mitigation typically depends significantly on Transportation Demand Measures (TDMs). Generally, these measures encompass two primary strategies: policy-based strategies and infrastructure-related strategies. The California Air Pollution Control Officers Association (CAPCOA) guide for Quantifying Greenhouse Gas Mitigation Measures is one of the primary bases for

estimating mitigation effects in California. The most recent version of CAPCOA's Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity was published in January 2022.[1] While this resource is of great significance, caution is essential when applying it, especially as some measures were developed based on small sample sets. In addition, many measures are rooted in observations from densely urbanized regions. Depending on the chosen measures, they can pose challenges in terms of mitigation monitoring. Furthermore, they are often not favored by project applicants because of the potential need to be managed and paid for in perpetuity. Such constraints have led authorities to gravitate towards programmatic strategies for VMT mitigation.

The measures[2] were reviewed to determine the most applicable measures for the City. While certain measures can be applied to specific projects, many are more effective when used systematically.

- *Limit residential parking supply (T-15):* This measure involves reducing the total parking supply available at a residential project or site. This can decrease VMT by up to 13.7%. Achieving the higher end of this reduction typically requires a well-integrated transit system and strong support for alternative transportation modes.
- *Extend transit network coverage or hours (T-25):* This measure involves expanding the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site. This can decrease VMT by up to 4.6% for any specific site, particularly in more urbanized areas with frequent and reliable transit service.
- *Increase transit service frequency (T-26)*: This measure would increase transit frequency on one or more transit lines serving the plan/community. It can reduce passenger VMT by up to 11.3%.
- *Implement commute trip reduction program (T-5&T-6):* This measure can be implemented as either voluntary or mandatory programs with monitoring. Voluntary programs, which encourage shifts in travel behavior, can reduce VMT by up to 4%, depending on the program's effectiveness and participant engagement. Mandatory programs include all elements of voluntary programs but also impose mandatory trip reduction requirements, penalties for non-compliance, and regular monitoring and reporting. These mandatory programs can decrease VMT by up to 26%. This measure is intended for employment locations and not relevant for consideration at residential projects.
- *Implement commute trip reduction marketing (T-7):* Campaigns or marketing strategies that promote trip reduction programs can reduce VMT (Vehicle Miles Traveled) by up to 4% for each employer. The impact is generally more significant when combined with other trip reduction measures. This measure is intended for employment locations and not relevant for consideration at residential projects.

[1] California Air Pollution Control Officers Association (CAPCOA). Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Available at: https://www.caleemod.com/documents/handbook/full_handbook.pdf.

[2] The "T" references in these measures are sourced from the most recent version of CAPCOA's Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, published in January 2022.

- *Implement a bike-share program (T-22-A &T-22-B)*: This measure involves establishing a bike-share program, providing users with on-demand access to bikes for short-term rentals. Non-electric bike-share programs can reduce VMT by up to 0.02% per site, while electric bike-share programs can reduce VMT by up to 0.06%. These programs are typically more effective in dense urban areas where short trips by car are common.
- *Construct or improve bike facility (T-19-A)*: This measure involves constructing or improving a single bicycle lane facility (limited to Class I, II, or IV) that connects to a larger existing bikeway network. Enhancing bicycle infrastructure can lead to a VMT (Vehicle Miles Traveled) reduction of 0.8% per site. The effectiveness depends on the network's extent and its connectivity to key destinations.
- *Integrate affordable and below market rate housing (T-4)*: Locating affordable housing closer to job centers and achieving a jobs/housing balance near transit can reduce VMT by up to 28.6% per site. The reduction is more substantial when housing is integrated into well-planned, transit-oriented developments (TODs).

Option 2: 2046 Regional Transportation Plan & the Sustainable Communities Strategy.

As required by SB 375, SJCOG develops a Sustainable Communities Strategy (SCS) every four years as part of updating its Regional Transportation Plan (RTP). The SJCOG RTP/SCS outlines several regional approaches to reducing a project's VMT efficiency over time and potentially mitigate a project's VMT impacts. These approaches emphasize the integration of land use planning with transportation enhancements. Key approaches from the RTP/SCS relevant to the City include:

- Improve the job-housing balance in the region
- Focus new growth around transit
- Optimize public transportation
- Promote and improve active transportation
- Prioritize projects that make more efficient use of the existing road network

Option 3: Participation in a VMT Bank.

Programmatic approaches, where large infrastructure projects are jointly funded, show potential for VMT reduction. This is because they allow projects to pay a one-time fee proportional to their impact without the need for continuous monitoring or management of on-going VMT mitigation measures. In addition, these strategies can benefit the public by funding transportation improvements that may not be constructed or implemented otherwise. This can lead to less traffic congestion, lower GHG emissions, more transport options, and more chances for active transportation.

In a VMT Banking framework, various VMT-reducing measures are bundled, and their total VMT reduction is turned into buyable credits. These credits can then be bought to offset the amount of VMT a project is over a respective jurisdiction's threshold. The VMT-reducing measures in the bank can benefit either the wider region or just the local area. However, having a VMT Bank could offer valuable options for developments that might otherwise struggle to lessen their impact. The City has developed a draft program which is still under consideration for implementation.

Summary

As noted previously in this chapter, due to the general nature of the Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that would reduce VMT for specific projects as part of this analysis. The VMT numbers identified in Table 3.4-2 show the VMT for implementation of the entire Project. Individual sites included in the Project may or may not exceed the threshold of significance and they may include site-specific project elements or mitigation measures that reduce VMT to below the threshold of significance. As such the significant impacts identified in Table 3.4-2, are unavoidable given known current feasible mitigation options.

The City of Tracy has developed a project-level VMT calculator and mitigation tool in order to assess potential VMT impacts and mitigation strategies of proposed development projects. The VMT calculator tool allows for project information to be input, and generates VMT estimates for the project based on a variety of factors including but not limited to land use type, project size, project location, project trip generation characteristics, proximity to transit, etc. The VMT estimates are then compared to the applicable threshold of significance (15% below baseline conditions). If a proposed project would exceed the applicable threshold of significance, a range of TDMs are identified to reduce the VMT of the project. The VMT calculator provides estimates of the effectiveness of the available TDMs to reduce the project's VMT estimates. The TDMs contained within the VMT calculator are based on the CAPCOA strategies identified above.

As noted in Chapter 2.0, Project Description, one component of the Project analyzed in this EIR is the updates to the Tracy General Plan Circulation Element. Policy CIR-1.8.P4 and Policy CIR-1.8.P5 have been included in the Circulation Element, which calls for the City to review future development projects using the VMT calculator, and to implement TDMs and other VMT reduction strategies to reduce project-level VMT impacts to the greatest extent feasible.

Implementation of the VMT calculator at the project review stage for subsequent development proposals, and the application of TDMs identified in the VMT calculator at the project level would reduce the impact to the greatest extent feasible. However, due to the general and programmatic nature of the Project, and the fact that site-specific VMT analyses cannot be completed at this time, this impact is considered ***potentially significant***.

SIGNIFICANCE BEFORE MITIGATION

Potentially Significant

MITIGATION MEASURE(S)

None Available

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Significant and Unavoidable

Due to the programmatic nature of the Tracy Rezone Program and General Plan Amendment, site-specific VMT analyses cannot be completed at this time. While implementation of General Plan Policy CIR-1.8.P4 and Policy CIR-1.8.P5 would require the City to review future development projects using the VMT calculator, and to implement TDMs and other VMT reduction strategies to reduce project-level VMT impacts to the greatest extent feasible, site specific VMT reduction measures cannot be identified at this time. Therefore, the impact would be ***significant and unavoidable***.

Impact 3.4-3: Implementation of the proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant)

Implementation of the proposed Project would result in the modification of existing transportation facilities including the introduction of new site driveways and access points. All new roadway, bicycle, and pedestrian infrastructure improvements constructed as part of the Project would be subject to, and designed in accordance with, applicable City of Tracy design and safety standards to avoid creating a geometric design hazard or incompatible uses. Therefore, this impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.4-4: Implementation of the proposed Project would not result in inadequate emergency access. (Less than Significant)

A significant project impact would occur if it resulted in inadequate emergency access. It is noted that the proposed Project does not propose site-specific development; emergency accessibility is typically assessed at the project level. The planning and design of new development resulting from the proposed Project would include considerations for road widths, intersections, and traffic flow to ensure that emergency vehicles can navigate efficiently as required by City of Tracy standards and guidelines. The City would also consider the need for increasing the availability of emergency services under its existing impact fee program updates. Based on this information and the general distribution of proposed rezoning sites across the City, this impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

CUMULATIVE IMPACTS

"Cumulative impacts," according to the CEQA Guidelines are significant effects resulting from the combination of two or more individual effects, which may stem from a single or multiple projects. These impacts compound or increase other environmental impacts. Cumulative impacts consider the environmental changes from the incremental impact of the project alongside other related past, present, and reasonably foreseeable future projects. The cumulative setting for the foregoing analysis is based on the Assumptions in the Dixon Travel Demand Model as previously described for the Cumulative (2040) scenario.

Impact 3.4-5: Implementation of the proposed Project, in combination with other cumulative development, would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (Less than Significant)

Most residents in the City of Tracy will have the option to take transit to work or non-work destinations in the future. Additionally, cumulative growth in the city is not expected to result in any adverse effects on any existing transit facilities or on any existing bike or pedestrian facilities.

The City of Tracy would continue to implement assessment of buffer zones around transit stations, bike and pedestrian facilities, and review future projects to ensure they align with the City of Tracy's goals and policies, ensuring high connectivity (General Plan Goal CC-2), providing access and mobility while maintaining quality of life (Transportation Master Plan Goal CIR-1), and promoting safe bicycle and pedestrian travel (Goal CIR-3). Furthermore, future growth in the city would support a balanced transportation system that encourages public transit use (Goal CIR-4 from both the Transportation Master Plan and Short-Range Transit Plan) and meet the SJCOG RTP performance metrics for development near transit stations and infill areas, preserving the efficiency of the existing transportation system. As such, cumulative development would have a ***less-than-significant*** cumulative impact on multimodal transportation facilities.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.4-6: Implementation of the proposed Project, in combination with other cumulative development, would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT). (Less than Significant)

As discussed in Impact 3.4-2, the 2046 No Build scenario would result in a VMT per capita of 17.5 and a VMT per employee of 13.0. These metrics would be above the threshold for VMT per capita (16.6), but below the threshold for VMT per employee (21.6). Therefore, cumulative development in the city would have a potentially significant impact on VMT.

The 2046 Buildout scenario resulted in a VMT per capita of 15.3 and VMT per employee of 13.4. In the 2046 Buildout, both the VMT per capita and VMT per employee are below the established thresholds. The VMT per capita value is reduced by 2.2 VMT per capita between the 2046 No Build and the 2046 Buildout scenarios for residential uses. However, the VMT per employee value is increased by 0.4 VMT per employee between the 2046 No Build and 2046 Buildout scenarios for employment uses. The 2046 Buildout scenario results in VMT per capita and the VMT per employee are below the thresholds, the proposed Project would not have a cumulatively considerable contribution to a cumulative impact, and the impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.4-7: Implementation of the proposed Project, in combination with other cumulative development, would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant)

Cumulative development would be required to conform with applicable City of Tracy design and safety standards to avoid creating a geometric design hazard or incompatible uses. Individual project sites may be subject to design review, ensuring that individual site plans do not create a hazard due to driveways, access points, pedestrian walkways, or other design features. Therefore, this cumulative impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.4-8: Implementation of the proposed Project, in combination with other cumulative development, would not result in inadequate emergency access. (Less than Significant)

The planning and design of new cumulative development would include considerations for road widths, intersections, and traffic flow to ensure that emergency vehicles can navigate efficiently as required by City of Tracy standards and guidelines. The City would also consider the need for increasing the availability of emergency services under its existing impact fee program updates. Therefore, this cumulative impact would be ***less than significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

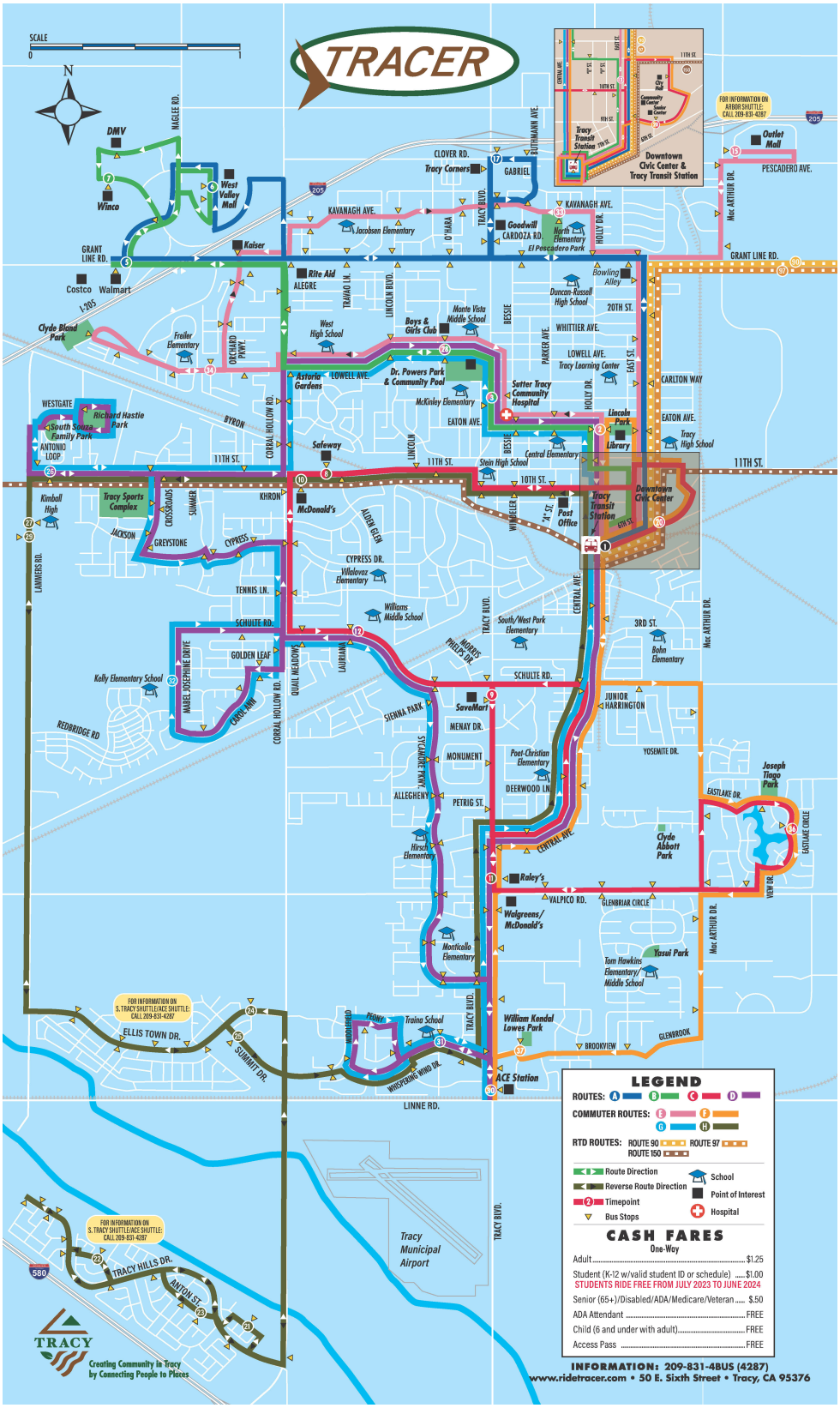


Figure 3.4-1.

Tracer Routes

Source: Kimley Horn; City of Tracy. Map date: September 4, 2024.

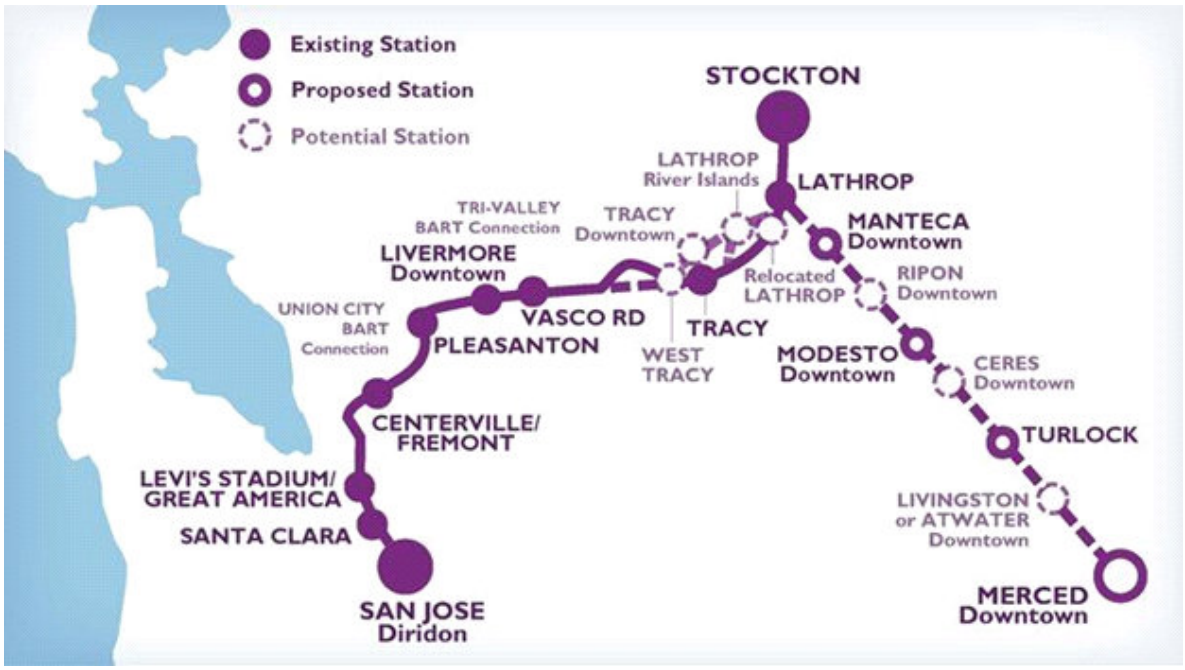


Figure 3.4-2.

ACE Station Locations

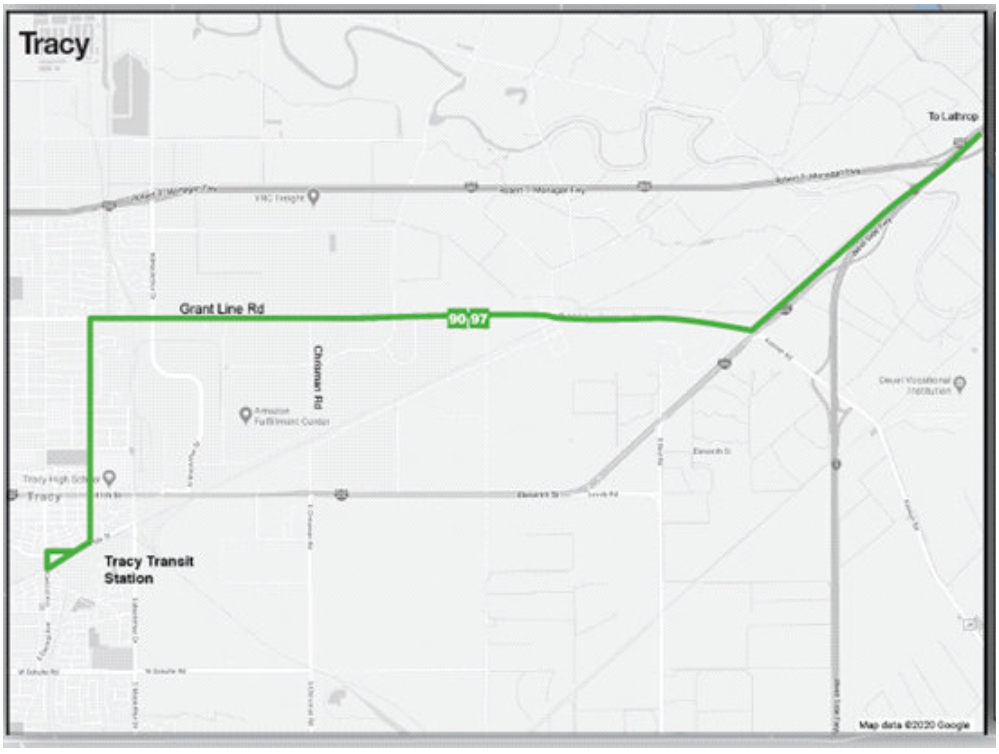


Figure 3.4-3.

SJ RTD Tracy Stations

Sources: Kimley Horn. Map date: September 5, 2024.

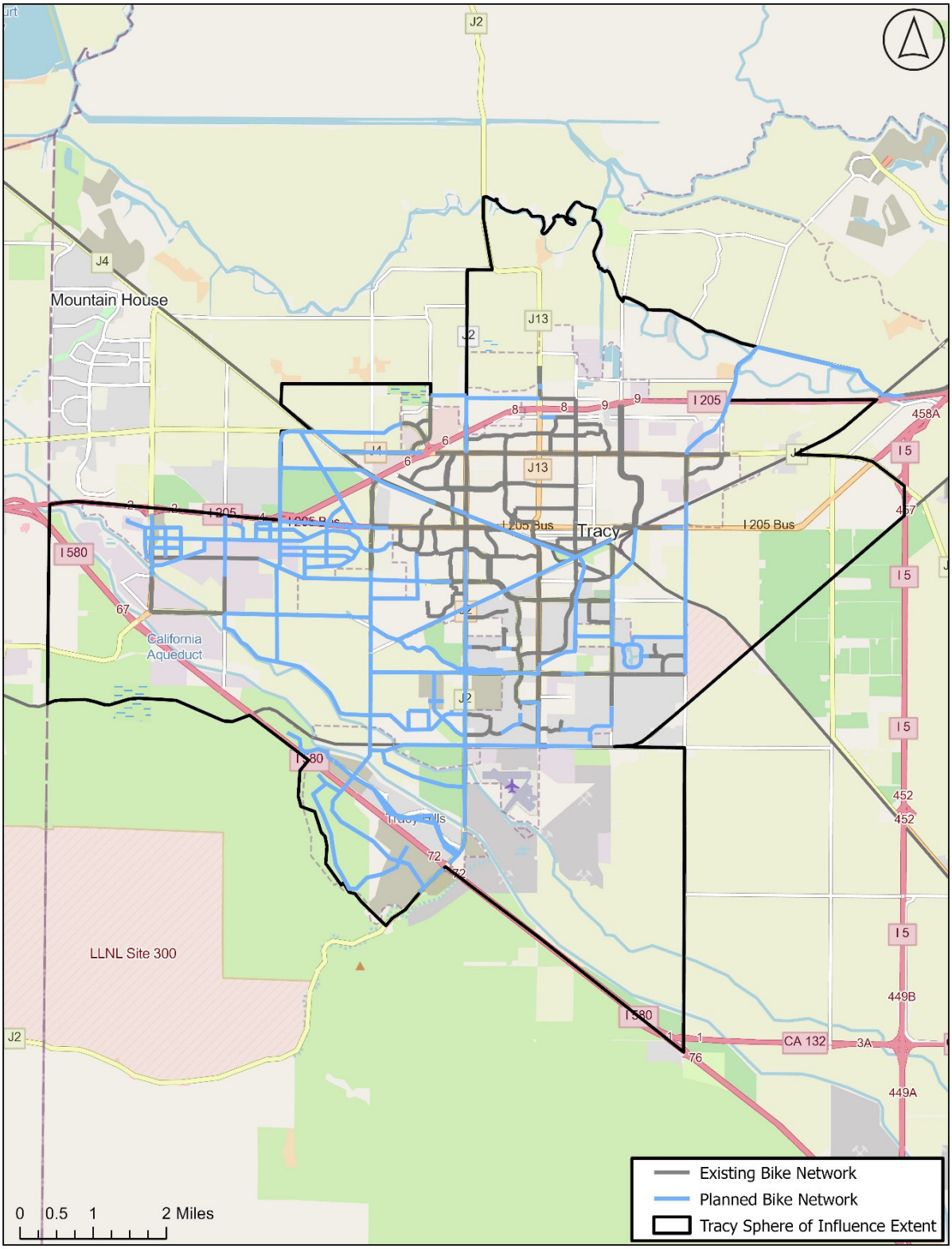


Figure 3.4-4.

Bike Network

Source: Kimley Horn. Map date: September 5, 2024.

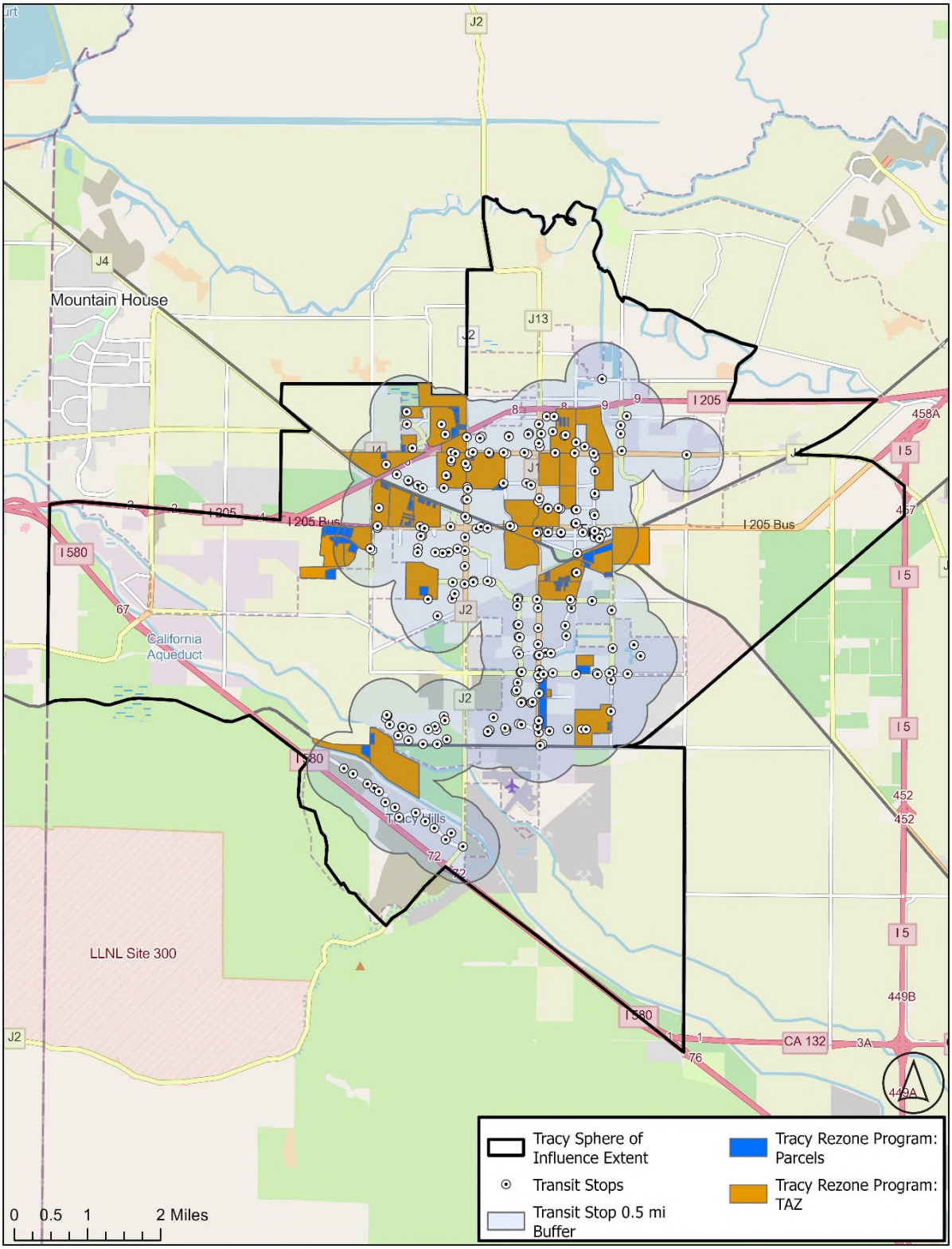


Figure 3.4-5.

Buffer Zones around Transit Stops

Source: Kimley Horn. Map date: December 8, 2025

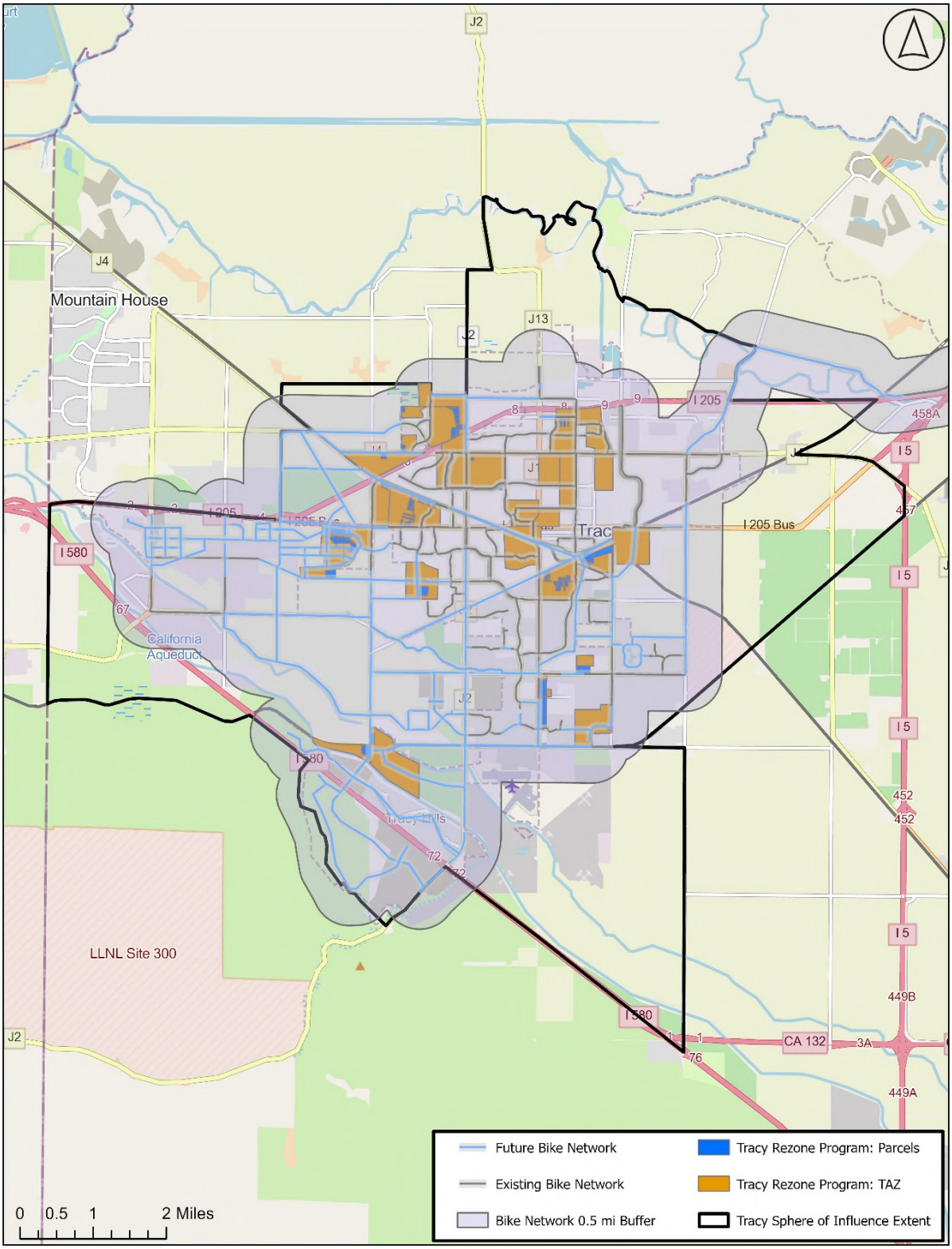


Figure 3.4-6.

Buffer Zones around Bikeways/Trails

Source: Kimley Horn. Map date: December 8, 2025.

This section provides a discussion of the prehistory and ethnographic background, existing cultural resources within Tracy, the regulatory setting, an impact analysis, and mitigation measures. Information in this section is derived primarily from the City of Tracy General Plan (City of Tracy, 2011) and the City of Tracy General Plan EIR (City of Tracy, 2005).

Two comments were received during the public review period or scoping meeting for the Notice of Preparation (NOP) regarding this topic from the following: Native American Heritage Commission (NAHC) (June 17, 2024) and Muwekma Ohlone Indian Tribe (July 5, 2024). These comments are addressed within this section. Full comments received are included in Appendix A.

KEY TERMS

The following key terms are used throughout this section to describe cultural and tribal resources and the framework that regulates them:

Archaeology. The study of historic or prehistoric peoples and their cultures by analysis of their artifacts and monuments.

Complex. A patterned grouping of similar artifact assemblages from two or more sites, presumed to represent an archaeological culture.

Ethnography. The study of contemporary human cultures.

3.5.1 ENVIRONMENTAL SETTING

CULTURAL AND HISTORICAL BACKGROUND

The following information is from the City of Tracy General Plan EIR.

Prehistory/Ethnography

The northern San Joaquin Valley is one of the least known ethnographic areas of California. Although little record of their culture has survived, it is known that Native Americans occupied northern portions of San Joaquin County for over 10,000 years. Prior to European-American contact, the Tracy area was inhabited by the Northern Valley Yokuts, part of a larger population that occupied much of the San Joaquin Valley, whose range extended from the Calaveras River to the southern extent of the San Joaquin River.

Two northern Yokut tribelets lived near what is now Tracy: the Chulamni (or Cholbumne) to the north, and the Hoyumne to the southeast. The Yokuts lived in permanent villages on high ground near watercourses and subsisted on fishing, hunting, catching fowl and intensive collecting. The Chulamni tribelet built their villages near Tracy along the banks of the Old River and San Joaquin River, and along creeks in the Diablo Range. The largest Chulamni village site near Tracy, Pescadero, was named by the Spanish during one of their first expeditions there in 1810 and 1811. Unfortunately, little else is known about Yokut culture.

Spanish colonial expeditions and mission recruitment beginning around 1770 lead to the rapid decline of Indian populations in the Valley. Permanent Hispanic populations along the coast brought disease to Indian populations against which they had no resistance. The result was widespread epidemics that killed about 75 percent of the Valley people before the end of 1846. American settlement around 1848 destroyed what remained of Valley Indian cultures and people. Yokuts were driven from their homes along watercourses with the discovery of gold in the Sierra foothills. The expansion of Valley agriculture shortly thereafter forced the remaining Yokuts to leave for the mountains. There are no known surviving Yokut Indians.

History

Permanent settlement in what is now the Tracy City limits began after construction of the Central Pacific Railroad through the Altamont Pass in 1869. Southern Pacific laid a second rail line to the north in 1878, connecting San Joaquin County with Martinez. In 1887, a third line was extended south from the junction of these two railways, connecting the Bay Area with Los Angeles. In 1882, Southern Pacific established the "Town of Tracy" around the junction of the three rail lines. The town was named after Lathrop J. Tracy, an Ohio railroad man and grain merchant. The Town's strategic location led to early prosperity as a commercial and service center. Tracy was incorporated in 1910.

Tracy has continued to grow, particularly over the past 50 years. This growth has been influenced by four main factors:

- The establishment of the Tracy Defense Depot during World War II created thousands of jobs and brought new residents to the area.
- The location of major agricultural industries in Tracy after the war.
- High home values in the Bay Area and the resulting increase in demand for lower cost housing in Tracy.
- Tracy's strategic proximity to several major interstates and relatively inexpensive land values encouraged the development of large shipping and distribution facilities.

Existing Cultural Resources

In general, little archaeological or paleontological work has been completed in San Joaquin County. Cultural resources in the Tracy Planning Area outside of City limits are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Large portions of the Tracy Planning Area have not been surveyed for prehistoric artifacts.

ARCHAEOLOGICAL RESOURCES

Very few prehistoric archaeological sites have been recorded in the vicinity of Tracy Planning Area. The Central California Information Center lists 32 cultural resource sites within the Tracy Planning Area. Nineteen of these resources are historic sites, 13 exhibit prehistoric features and one site exhibits both historic and prehistoric features. The noted prehistoric resources include four Native American burial sites that were recorded in the Tracy area in 1939 when land leveling exposed

skeletal material and artifacts. These sites indicate that additional prehistoric sites may exist within the Tracy Planning Area. Exact locations of known archaeological sites cannot be published in public documents.

The 1993 Urban Management Plan Draft EIR reported nine archaeological investigations that had occurred in the Tracy Planning Area at that time. Additional archaeological investigations in the Tracy Planning Area were conducted by Foothill Archaeological Services for the West Tracy Planned Unit Development area in 1994, and by Archeo-Tec, Inc. for a parcel east of Corral Hollow Road in 1999.

PALEONTOLOGICAL RESOURCES

There are several rock formations in the Tracy Planning Area that could be indicators of potential paleontological resources. These include the Neroly Formation, Moreno Shale deposits, and Panoche Formations. According to a records search of the University of California Museum of Paleontology Collections Date, eighty fossils have been found and recorded within San Joaquin County. Over half of them are dated to the tertiary period, with quaternary being the second most frequent period. These are the first and second periods of the Cenozoic Era respectively, during which modern flora, apes, large mammals and eventually humans developed. The majority of fossils found within the Tracy Planning Area have been vertebrate in nature. Additionally, one paleobotany fossil and one microfossil have been found. Sites are mainly located south of I-205, along the I-580 corridor and the Delta-Mendota Canal; some clustering is found in the southwest portion of the Tracy Planning Area, in the slopes of the Diablo Range foothills.

NATIVE AMERICAN CONSULTATION

The City conducted Native American consultations under Senate Bill (SB) 18 (Chapter 905, Statutes of 2004), which requires local governments to consult with tribes prior to making certain planning decisions and requires consultation and notice for a general and specific plan adoption or amendments in order to preserve, or mitigate impacts to, cultural places that may be affected. In addition to SB 18 consultation, the City conducted tribal consultations under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as Assembly Bill (AB) 52, which requires consulting for projects within the City's jurisdiction and within the traditional territory of the Tribal Organizations who have previously requested AB 52 consultations with the City.

On June 17,2024, the City sent letters via certified mail to Native American Tribal Organizations in compliance with AB 52 and SB 18; refer to Appendix E for tribal consultation communications. The Confederated Villages of Lisjan Nation responded in writing to the City on July 9,2024, requesting consultation for the proposed project. The City and the Confederated Villages of Lisjan Nation held a consultation meeting on September 11, 2024. No new specific information on tribal cultural resources was presented or provided during the consultation meeting.

During the Notice of Preparation public review period, the Muwekma Ohlone Indian Tribe requested consultation with the City on July 5, 2024. As of the time of the writing of this EIR, the City has been unable to successfully schedule a meeting to consult.

3.5.2 REGULATORY SETTING

FEDERAL

National Historic Preservation Act

The National Historic Preservation Act was enacted in 1966 as a means to protect cultural resources that are eligible to be listed on the NRHP. The law sets forth criterion that is used to evaluate the eligibility of cultural resources. The NRHP is composed of districts, sites, buildings, structures, objects, architecture, archaeology, engineering, and culture that are significant to American History.

Virtually any physical evidence of past human activity can be considered a cultural resource. Although not all such resources are considered to be significant and eligible for listing, they often provide the only means of reconstructing the human history of a given site or region, particularly where there is no written history of that area or that period. Consequently, their significance is judged largely in terms of their historical or archaeological interpretive values. Along with research values, cultural resources can be significant, in part, for their aesthetic, educational, cultural and religious values.

National Register of Historic Places

The eligibility criteria for the NRHP are as follows (36 CFR 60.4):

> *The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess aspects of integrity of location, design, setting, materials, workmanship, feeling, association, and*
>
> *(A) that are associated with events that have made a significant contribution to the broad patterns of our history and cultural heritage; or*
> *(B) that are associated with the lives of persons significant in our past; or*
> *(C) that embody the distinctive characteristics of a type, period, region, or method of construction, or that represent the work of a master, or that possess high artistic values or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
> *(D) that have yielded, or may be likely to yield, information important in prehistory or history.*

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

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

Other Federal Legislation

Historic preservation legislation was initiated by the Antiquities Act of 1966, which aimed to protect important historic and archaeological sites. It established a system of permits for conducting archaeological studies on federal land, as well as setting penalties for noncompliance. This permit process controls the disturbance of archaeological sites on federal land. New permits are currently issued under the Archaeological Resources Protection Act (ARPA) of 1979. The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 declared that it is national policy to "Preserve for public use historic sites, buildings, and objects of national significance."

STATE

California Register of Historic Resources

The CRHR was established in 1992 and codified in the Public Resource Code §5020, 5024 and 21085. The law creates several categories of properties that may be eligible for the CRHR. Certain properties are included in the program automatically, including: properties listed in the NRHP; properties eligible for listing in the NRHP; and certain classes of State Historical Landmarks. Determining the CRHR eligibility of historic and prehistoric properties is guided by California Code of Regulations (CCR) §§15064.5(b) and Public Resources Code (PRC) §§21083.2 and 21084.1.

Cultural resources, under CRHR guidelines, are defined as buildings, sites, structures, or objects that may have historical, architectural, archaeological, cultural, or scientific importance. A cultural resource may be eligible for listing on the CRHR if it:

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

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines §§15064.5 provides guidance for determining the significance of impacts to archaeological and historical resources. Demolition or material alteration of a historical resource, including archaeological sites, is generally considered a significant impact. Determining the CRHR eligibility of historic and prehistoric properties is guided by CCR §§15064.5(b) and PRC §§21083.2 and 21084.1.

CEQA also provides for the protection of Native American human remains (CCR §§15064.5[d]). Native American human remains are also protected under the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001 et seq.), which requires federal agencies and certain recipients of federal funds to document Native American human remains and cultural items within their collections, notify Native American groups of their holdings, and provide an opportunity for repatriation of these materials. This act also requires plans for dealing with potential future collections of Native American human remains and associated funerary objects, sacred objects, and objects of cultural patrimony that might be uncovered as a result of development projects overseen or funded by the federal government.

If a prehistoric or historic period cultural resource does not meet any of the four CRHR criteria, but does meet the definition of a "unique" site as outlined in PRC §§21083.2, it may still be treated as a significant resource if it is: an archaeological artifact, object or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

California Health and Safety Code

California Health and Safety Code §§7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC. The CEQA Guidelines (§§15064.5) specify the procedures to be followed in case of the discovery of human remains on non-federal land. The disposition of Native American burials falls within the jurisdiction of the NAHC.

Senate Bill 18 (Burton, Chapter 905, Statutes 2004)

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning. This legislation, which amended §§65040.2, §§65092, §§65351,

§§65352, and §§65560, and added §§65352.3, §§653524, and §§65562.5 to the Government Code; also requires the Governor's Office of Planning and Research (now the Governor's Office of Land Use and Climate Innovation) to include in the General Plan Guidelines advice to local governments for how to conduct these consultations. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §§65300 et seq.) and specific plans (defined in Government Code §§65450 et seq.).

Assembly Bill 978

In 2001, AB 978 expanded the reach of Native American Graves Protection and Repatriation Act of 1990 and established a state commission with statutory powers to assure that federal and state laws regarding the repatriation of Native American human remains and items of patrimony are fully complied with. In addition, AB 978 also included non-federally recognized tribes for repatriation.

Assembly Bill 52

AB 52, approved in September 2014, creates a formal role for California Native American tribes by creating a formal consultation process and establishing that a substantial adverse change to a tribal cultural resource has a significant effect on the environment. Tribal cultural resources are defined as:

1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    A) Included or determined to be eligible for inclusion in the CRHR;
    B) Included in a local register of historical resources as defined in PRC §§5020.1(k).
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC §§5024.1 (c). In applying the criteria set forth in PRC §§5024.1 (c) the lead agency shall consider the significance of the resource to a California Native American tribe.

A cultural landscape that meets the criteria above is also a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. In addition, a historical resource described in PRC §§21084.1, a unique archaeological resource as defined in PRC §§21083.2(g), or a "non-unique archaeological resource" as defined in PRC §§21083.2(h) may also be a tribal cultural resource if it conforms with above criteria.

AB 52 requires a lead agency, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California

Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

LOCAL

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to cultural and tribal resources. General Plan policies applicable to the Project are identified below:

POLICIES: COMMUNITY CHARACTER

- CC-3.1-P2. Identified cultural and historical landmarks and buildings shall be preserved.
- CC-3.1-P3: New development, redevelopment, alterations, and remodeling projects should be sensitive to surrounding historic context.
- CC-3.1-P4: As part of the development review process, there shall be a standard condition of approval that if any resources are found during construction, all operations within the project area shall halt until an assessment can be made by appropriate professionals regarding the presence of archaeological and paleontological resources and the potential for adverse impacts on these resources.
- CC-3.1-P5: Any archaeological or paleontological resources on 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, then construction must cease immediately until accurate study and conservation measures are implemented.
- CC-3.1-P6: If Native American artifacts are discovered on a site, the City shall consult representatives of the Native American community to ensure the respectful treatment of Native American sacred places.

City of Tracy Municipal Code

Tracy Municipal Code Title 9 addresses building regulations. Chapter 9.48 adopts the California Historical Building Code. The purpose of the chapter is to "provide regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or structures designated as qualified historical buildings or properties; provide alternative solutions for the preservation of qualified historical buildings or properties, to provide access for persons with disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of occupants or users."

3.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

CEQA Guidelines Appendix G contains the Initial Study Environmental Checklist, which includes questions related to tribal cultural resources. The issues presented in the Initial Study Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it would:

- 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:
    - 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) (refer to Impact Statement 3.5-1); or
    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe (refer to Impact Statement 3.5-1).

IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: The proposed Project could 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:

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

Prehistoric archaeological sites and isolates are tribal cultural resources; additionally, plants and other natural resources, as well as geographic locations can also be tribal cultural resources. Grading of original in situ soils could expose buried tribal cultural resources and features including sacred sites. Redevelopment and development of previously undeveloped areas have the potential to impact known and unknown tribal cultural and archaeological resources. Surface-level and subsurface archaeological sites and deposits can be affected by ground-disturbing activities associated with construction activities.

The City of Tracy General Plan EIR states that very few prehistoric archaeological sites have been recorded in the vicinity of Tracy. However, prehistoric resources including four Native American burial sites were recorded in the Tracy area in 1939 when land leveling exposed skeletal material and artifacts. These sites indicate that additional prehistoric sites may exist within the Tracy Planning Area.

On June 17,2024, the City sent letters via certified mail to Native American Tribal Organizations in compliance with AB 52 and SB 18; refer to Appendix E for tribal consultation communications. The Confederated Villages of Lisjan Nation responded in writing to the City on July 9,2024, requesting consultation for the proposed project. The City and the Confederated Villages of Lisjan Nation held a consultation meeting on September 11, 2024. No new specific information on tribal cultural resources was presented or provided during the consultation meeting. Based on information in the City of Tracy General Plan EIR, there is a moderate to high potential of discovery of previously unknown tribal cultural resources during ground-disturbing activities. This is a ***potentially significant*** impact.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Potentially Significant

MITIGATION MEASURE(S)

Mitigation Measure 3.5-1(a): *If any historical resources, cultural resources, including prehistoric or historic artifacts, or other indications of archaeological resources, are found during grading and construction activities during any phase of the Project, all work shall be halted immediately within a 200-foot radius of the discovery until an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, has evaluated the find(s).*

Work shall not continue at the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially significant or eligible for listing on the NRHP or CRHR; or 3) not a significant Public Trust Resource.

In addition, if the resource(s) identified is cultural or tribal in nature, the Confederated Villages of Lisjan shall be contacted to review and identify the resource, prior to work continuing at the discovery site.

If Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, would also be required and, if Native American resources are identified, shall be retained at the Project applicant's expense.

Mitigation Measure 3.5-1(b): *If human remains are discovered during the course of construction during any phase of the Project, work shall be halted at the site and at any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner has been informed and has determined that no investigation of the cause of death is required. If the remains are of Native American origin, either of the following steps will be taken:*

- *The coroner shall contact the Native American Heritage Commission in order to ascertain the Most Likely Descendant (MLD) from the deceased individual. If a MLD is identified, the MLD, with the permission of the owner of the land, or his or her authorized representative, in accordance with the law, may inspect the site discovery site and recommend to the landowner, or his or her representative, means for the treatment or disposition, with appropriate dignity' of the human remains and any associated grave goods. The landowner has no legal obligation to allow the MLD accesses to the property for the purpose of making a recommendation. The MLD must complete their inspection and make their recommendation within 48 hours of their notification by the NAHC. The recommendation may include the scientific removal and analysis of human remains and items associated with Native American burials. The coroner shall make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.*
- *The landowner shall retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:*
    - *The Native American Heritage Commission and Confederated Villages of Lisjan is unable to identify a descendent.*
    - *The descendant identified fails to make a recommendation.*
    - *The City of Tracy or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.*

SIGNIFICANCE AFTER MITIGATION

Less than Significant

Mitigation Measures 3.5-1(a) and (b) would reduce the potential impacts of the proposed Project on inadvertently discovered tribal cultural resources to a ***less-than-significant level*** by determining

if the remains are Native American in origin and, if determined to be Native American, a Most Likely Descendant is assigned to determine the treatment.

CUMULATIVE IMPACTS

The cumulative context for tribal cultural resources includes San Joaquin and the Confederated Villages of Lisjan Nation and the Muwekma Ohlone Indian Tribe traditional territories.

Impact 3.5-2: The proposed Project, in combination with other cumulative development, could 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:

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

Cumulative development in San Joaquin County, in portions of the Sacramento Valley identified as the territory of the Confederated Villages of Lisjan Nation or the Muwekma Ohlone Indian Tribe, or the area of historic-era use and occupation in San Joaquin County could result in significant cumulative impacts on tribal cultural resources. Each individual project is subject to review under CEQA and is required to obtain necessary permits and approvals from federal and state resource agencies. As a result of these processes, each project would be required to avoid, minimize, and compensate for its impacts on sensitive cultural resources, such that the cumulative impact would be reduced, though not completely eliminated. Because not all such impacts from these other projects have been or can be reduced with certainty to less-than-significant levels, the loss of any tribal cultural resources would result in a potentially significant cumulative impact.

The City of Tracy General Plan EIR states that very few prehistoric archaeological sites have been recorded in the vicinity of Tracy. However, prehistoric resources including four Native American burial sites were recorded in the Tracy area in 1939 when land leveling exposed skeletal material and artifacts. These sites indicate that additional prehistoric sites may exist within the Tracy Planning Area.

The discovery of previously unknown tribal cultural resources is possible given the history of the area. As a result, development allowed under the proposed Project could result in a considerable contribution to the cumulative loss of tribal cultural resources in San Joaquin County and in portions of the Confederated Villages of Lisjan Nation OR the Muwekma Ohlone Indian Tribe historic territories, and this cumulative impact would be ***potentially significant***.

LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Potentially Significant

MITIGATION MEASURE(S)

Mitigation Measure 3.5-2: *Implement Mitigation Measures 3.5-1(a) and (b).*

SIGNIFICANCE AFTER MITIGATION

Less than Significant

Mitigation Measures 3.5-1(a) and (b) would reduce the potential impacts of the proposed Project on inadvertently discovered tribal cultural resources to a ***less-than-significant level*** by determining if the remains are Native American in origin and, if determined to be Native American, a Most Likely Descendant is assigned to determine the treatment.

This section describes the regulatory setting, impacts associated with wastewater services, water services, storm drainage, and solid waste disposal that are likely to result from Project implementation, and measures to reduce potential impacts to wastewater, water supplies, storm drainage, and solid waste facilities. This section is based in part on the following documents, reports and studies: *California's Groundwater,* CalRecycle *Solid Waste Information System,* CalRecycle *Jurisdiction Diversion/Disposal Rate Summary*, *Urban Water Management Plan* (2020), Citywide *Water System Master Plan* (2024), Citywide *Storm Drainage Master Plan* (2022), *Wastewater Master Plan* (2023), *Citywide Public Facilities Master Plan* (2024), and the *Tracy Water Supply and Wastewater Treatment Capacity Evaluations* (West Yost, 2024).

No comments on the Notice of Preparation (NOP) were received regarding this environmental topic (see Appendix A).

3.6.1 WASTEWATER SERVICES

ENVIRONMENTAL SETTING

The City provides wastewater service to approximately 83,000 residents, industrial and commercial customers. The wastewater collection system includes approximately 210 miles of active gravity sewer lines, ranging from 4 to 48 inches in diameter, 3 lift stations and associated force mains. Wastewater generated in the sewer service area is conveyed to the City's Wastewater Treatment Plant (WWTP).

Wastewater Conveyance

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. Generally, the flow within the system flows from south to north. The Hansen lift station collects flow from the Hansen Road sewer and the flows into the Larch lift station which is then conveyed to the WWTP. Larch lift station collects flows from Corral Hollow Road. The MacArthur lift station collects flows on the east side of the system and conveys flows to the WWTP. A gravity main along the spur line railroad conveys a portion of the system to the WWTP by gravity. Nearly all of the City's sewer pipelines are gravity sewers. The majority of the City's gravity sewers are 8 inches in diameter, with the largest being 48 inches in diameter. In addition, the City owns and operates 3 active wastewater lift stations throughout the city.

Wastewater Treatment

Wastewater from the city is currently treated at the WWTP. The WWTP is located between MacArthur Drive and Holly Drive just north of Interstate 205. The National Pollutant Discharge Elimination System (NPDES) permit CA0079154 allows for discharge of 10.8 million gallons per day (mgd) and up to 16 mgd if applicable treatment facilities are constructed. The City of Tracy Wastewater Master Plan Update (WWMPU) contains a WWTP evaluation and proposed WWTP upgrades. The WWMPU states that the City WWTP treats an average dry weather flow (ADWF) of 7.35 mgd and a peak wet weather flow (PWWF) of 16.95 mgd through a treatment train consisting of pretreatment ponds, screening headworks, primary clarifiers, secondary anoxic selectors, tertiary

coagulation and filtration, and chlorine disinfection. Projected average daily flows for the City WWTP for 2040 and City buildout conditions are 12.84 mgd and 15.65 mgd, respectively, while PWWFs for the same planning conditions are 25.35 mgd and 30.14 mgd.[1] Projected City WWTP flow rates were established through hydraulic modeling of known future developments with wastewater flow factors summarized in the WWMPU. The WWTP provides disinfected tertiary level treatment meeting Title 22 requirements of the Code of Regulations from the State Water Resource Control Board. The WWTP includes primary clarifiers, activated sludge, secondary clarifiers, flocculation, tertiary filtration, and disinfection. The influent is comprised of both municipal and industrial waste streams. The treatment facility operates municipal, industrial, and solids treatment processes.

The headworks of the facility consists of several processes beginning with influent receiving and splitting. There is a specified manhole at the facility for commercial as well as recreational sewage to be unloaded, where it joins with the influent stream from the sanitary sewer system. The combined influent flow is then split into up to two channels before entering two 36-inch pipes containing magnetic flow meters for measuring the influent flow. Following flow measurement, the influent is directed into a 3-foot-wide channel equipped with a mechanically cleaned screen. The screenings are directed to a washer/compactor to prepare the screenings for removal from the facility. Finally, the influent stream is measured for temperature, and sampled using an automatic composite sampler downstream of the influent screens before moving to the primary clarifiers.

Primary treatment begins with clarification to settle out particulate matter that passed through the influent screens. The facility currently operates two rectangular primary clarifiers and one circular primary clarifier. Straight edged weirs are used to split the flow equally to the two clarifiers that run-in tandem at any given time, with the third clarifier serving as redundancy. Downstream of the primary clarifiers is a flow equalization basin that also serves as emergency storage. The equalization basin is used to provide flexibility in higher flow scenarios for secondary treatment basin loading and tertiary treatment contact time.

Secondary treatment at the Tracy WWTP primarily consists of a biological treatment process split into two identical treatment trains. Each treatment train begins with an anoxic selector split into two compartments. The anoxic selectors are followed by two aerobic zones equipped with dissolved oxygen (DO) control. Following the biological treatment trains the flow is split and a portion of the flow is returned to the anoxic selectors to keep the anoxic environment sustained. Flow is then equally distributed between 3 secondary clarifiers to settle out the microorganisms and return a portion of them to the aeration basins. Following the secondary clarifiers, the flow enters the secondary effluent pump station where it is pumped to the tertiary filtration system.

The tertiary treatment system begins with the addition of an alum/polymer solution to stimulate coagulation before filtration to meet regulatory and filter operational requirements. The tertiary filtration system consists of two deep bed filtration trains of four filter cells per train. Each filter utilizes anthracite mono-media and is scoured with air and water for backwashing. These filters ensure that the effluent is treatment to meet the National Pollutant Discharge Elimination System

[1] City of Tracy, 2023. Wastewater Master Plan Update. July. p. 4-18.

(NPDES) limitations as well as recycled water requirements. Following the tertiary filters flow enters the disinfection channels following the addition of chloramines. The chlorine contact channel provides adequate time for disinfection regulations and is followed by addition of sulfur dioxide to dechlorinate to residual chlorine requirements before entering the reaeration zone. The effluent flow is reaerated using fine bubble membrane disc diffusers. The final step in the treatment process is metering the effluent flow using a Parshall flume before the effluent enters the final pumping station.

Planned Infrastructure Upgrades

The City has plans for development of new residential, industrial, commercial, and institutional areas through 2040 and buildout that will require expansion of existing wastewater conveyance and treatment infrastructure. The current WTWP capacity is not sufficient for the existing flows, in particular the outfall and secondary treatment system. Currently, the City WWTP capacity is limited by the outfall pipe and loading of the secondary anoxic selectors, both of which are undergoing expansions. Planned improvements to the outfall pipe will increase the outfall capacity from 9 mgd to 16 mgd while planned improvements to the secondary anoxic selectors will increase the secondary treatment capacity from 12.2 mgd to 16.2 mgd. The updated hydraulic capacity will provide enough capacity for just under projected buildout flows and provides capacity for approximately 15,350 equivalent dwelling units (EDUs) of growth. The secondary treatment load capacity will increase by approximately 30 percent as well, increasing from 18,000 pounds per day (ppd) of biochemical oxygen demand (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.[2]

Furthermore, the City is currently undergoing a series of WWTP upgrades, which has increased its treatment capacity from 9.01 mgd to 10.8 mgd. A final phase (phase 2C) has been designed but has not been implemented by the City yet and will include new effluent piping, a new pipeline diffuser system, new pumps and pump station upgrades, and a new flow meter vault, which will increase the WWTP capacity to 16 mgd.[3]

REGULATORY SETTING

Clean Water Act / National Pollutant Discharge Elimination System Permits

The Clean Water Act (CWA) is the cornerstone of water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water."

[2] City of Tracy, 2023. Wastewater Master Plan Update. July. p. 7-15.
[3] City of Tracy, 2023. Wastewater Master Plan Update. July. p. 7-15.

The CWA regulates discharges from “non-point source” and traditional “point source” facilities, such as municipal sewage plants and industrial facilities. Section 402 of the Act creates the NPDES regulatory program which makes it illegal to discharge pollutants from a point source to the waters of the United States without a permit. Point sources must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, storm water associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds.

Permit requirements for treatment are expressed as end-of-pipe conditions. This set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand, (2) total suspended solids (TSS), and (3) pH acid/base balance. These levels can be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment usually in the form of "activated sludge."

All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends its wastewater into a city sewer system, so it eventually goes to a sewage treatment plant. Although not regulated under NPDES, "indirect" discharges are covered by another CWA program called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries it to the municipal sewage treatment plant, through which it passes before being discharged to surface water.

The City’s current NPDES Permit, which regulates the wastewater effluent quantity and quality upon discharge, was issued by the Central Valley Regional Water Quality Control Board and is Order R5-2007-0038.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act is California’s statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State is required to adopt policies, plans, and objectives that will protect the State’s waters for the use by and enjoyment of Californians. In California, the SWRCB has the authority and responsibility for establishing policy related to the State’s water quality. Regional authority is delegated by the SWRCB to a Regional Water Quality Control Board (RWQCB). The Porter-Cologne Act authorizes the SWRCB and RWQCB to issue NPDES permits.

Under the Central Valley Regional Water Quality Control Board (CVRWQCB) NPDES permit system, all existing and future municipal and industrial discharges to surface water within the city would be subject to regulation. NPDES permits are required for operators of municipal separate storm sewer systems, construction projects, and industrial facilities. These permits contain limits on the amount of each pollutant that can be contained in each facility’s discharge.

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant wastewater. General Plan policies applicable to the Project are identified below:

POLICIES: PUBLIC FACILITIES ELEMENT

- PF-7.1-P1. The City shall maintain wastewater conveyance, treatment and disposal infrastructure in good working condition in order to supply municipal sewer service to the City's residents and businesses.
- PF-7.1-P2. The City shall expand the existing wastewater treatment plant to the extent possible or pursue a single new west side facility instead of building new facilities at multiple locations to meet future needs.
- PF-7.1-P3. New habitable structures located within the City limits shall connect to the public wastewater collection system.
- PF-7.2-P1. Wastewater collection and treatment facilities shall be designed to serve expected buildout of the areas served by these facilities but constructed in phases to reduce initial and overall costs.
- PF-7.2-P2. The City shall construct new wastewater trunk lines as needed. Individual development projects shall be responsible for construction of all collection lines other than trunk lines.
- PF-7.2-P3. The approval of new development shall be conditioned on the availability of sufficient capacity in the wastewater collection and treatment system to serve the project.
- PF-7.2-P4. "Package" treatment plants shall not be allowed in the City.
- PF-7.2-P5. New development shall fully fund the cost of new wastewater treatment and disposal facilities.
- PF-7.2-P6. Prior to any development approvals within an Urban Reserve, the City shall complete new wastewater master planning and wastewater treatment and disposal studies, particularly for the west side of the city. These studies are to be funded by proponents of new development and must show how adequate wastewater treatment will be provided to the Urban Reserve in question.
- PF-7.3-P1. New wastewater treatment plants should be located to allow for distribution of recycled water to application areas by gravity flow where feasible.
- PF-7.3-P2. The City shall integrate public facilities and wastewater reclamation sites with agricultural and open space preservation programs where feasible.
- PF-7.3-P3. Biosolid disposal shall be managed so as to minimize impacts to the environment and public health.
- PF-7.3-P4. The City shall establish wastewater treatment demand reduction standards for new development and redevelopment to reduce per capita and total demand for wastewater treatment.

City of Tracy Municipal Code

The City of Tracy Municipal Code (Code), Article 4, Wastewater Discharge Surveys, Permits, Monitoring, and Administration, consists of a number of provisions relating to wastewater, including Section 5.24.390 (Wastewater discharge surveys) which requires that all potential dischargers, as determined by the City, must file an annually updated Discharge Survey Report. Section 5.24.410 (Mandatory Discharge Permits) requires significant industrial users connecting to or discharging into the sewer to obtain a wastewater discharge permit. The application for the wastewater discharge

permit must include a baseline monitoring report that details wastewater constituents and characteristics and total, average, and peak wastewater flow rates, spill prevention and control measures, and certification that Pretreatment Standards are being consistently met, in compliance with Section 5.24.440 (Permit application and baseline monitoring report) of the Code. Wastewater Discharge Permits may contain a variety of conditions, as described in Section 5.24.450 (Permit conditions) of the Code, including the average and maximum allowable wastewater constituents and characteristics, limits on rate and time of discharge, specifications for monitoring programs, civil penalties and fees for non-compliance, and specifications as to what waste streams are authorized for discharge. Other sections of the Code relevant to wastewater include Section 5.24.550 (Data Collection) and Section 5.24.560 (Reporting Requirements) which describe the information that wastewater dischargers must provide, how such information will be collected, and the various standards that must be met in order to comply with discharge reporting requirements.

Utility Master Plans

The City of Tracy maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include: *Urban Water Management Plan* (2020), Citywide *Water System Master Plan* (2024), Citywide *Storm Drainage Master Plan* (2022) *Wastewater Master Plan* (2023), and the *Citywide Public Facilities Master Plan* (2024).

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on the environment associated with Utilities if it would:

- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it does not have adequate capacity to serve the project's projected demand in addition to the providers existing commitments; or
- Require or result in the relocation or construction of new or expanded wastewater treatment and/or collection facilities, the construction of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: The proposed Project would not have the potential to result in a determination by the wastewater treatment and/or collection provider which serves the project that the provider does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Less than Significant)

WASTE DISCHARGE REQUIREMENTS (WDRS) BOARD ORDER NUMBER NO. R5-2022-0073 (NPDES PERMIT NO. CA0079154).

The NPDES permit for the Tracy WWTP was adopted in December 2022. Treated wastewater from the Tracy WWTP is discharged to Old River under Order No. R5-2022-0073 (NPDES No. CA0079154).

Because, in the opinion of the Water Board, there is a potential impact to groundwater at the facility, the Tracy WWTP's industrial pretreatment ponds, industrial holding ponds, sludge drying beds, and biosolids storage areas of the facility are regulated by separate waste discharge requirements as defined in Order No. R5-2007-0038. The NPDES permit CA0079154 allows for discharge of Average Dry Weather Flows (ADWF) of 10.8 mgd and up to 16 mgd if applicable treatment facilities are constructed. The WWTP provides disinfected tertiary level treatment meeting Title 22 requirements of the Code of Regulations from the State Water Resource Control Board. The WWTP includes primary clarifiers, activated sludge, secondary clarifiers, flocculation, tertiary filtration, and disinfection.

The City's WWTP currently provides tertiary-level treatment for all flows received within the City's limits. Influent wastewater is primarily from domestic sources with the exception of industrial flows generated by Leprino Foods. Leprino Foods provides pretreatment to their industrial flows and disinfected effluent is discharged to Old River via a 3.5-mile outfall pipeline and diffuser system. Stabilized biosolids are dried and hauled offsite for land application.[4] There have been several modifications to the WWTP, most recently an additional digester and primary clarifier is under construction to create additional treatment capacity to meet existing demands.

The existing headworks system includes three mechanical screens operating in a duty/duty/standby configuration with a PWWF flow capacity of 38.7 mgd. Screen openings are six mm and provide acceptable trash removal for the current treatment scheme. Three screenings washer compactors are installed to remove organics from the screened material, which are then compacted and discharged to a hopper for disposal to landfill. Primary treatment includes three sedimentation basins, one 90-foot-diameter circular clarifier, and two 72-foot by 32-foot rectangular clarifiers. Currently, only the circular clarifier is in service, with the rectangular basins on standby.[5]

The City of Tracy's wastewater treatment system is currently in compliance with the WDR requirements of Order No. R5-2022-0073 NPDES NO. CA0079154 ("WDR Order"). The wastewater treatment system options covered under this Order include: City of Tracy WWTP including the collection system, basin/disposal fields, discharge to the Old River, and recycling conveyance and irrigation system.

The City's Wastewater Master Plan includes projected wastewater generation factors for various land uses. A summary of existing land uses within the City of Tracy city limits and corresponding wastewater flow factors are shown in Table 3.6-1. The wastewater flow factors shown in Table 3.6-1 are applied to a projected land use acreage as a means of estimating future average dry weather flows (ADWF).

[4] City of Tracy, 2012. Tracy Wastewater Master Plan. December. P. 4-1.
[5] City of Tracy, 2012. Tracy Wastewater Master Plan. December. P. 4-2.

TABLE 3.6-1: LAND USE FLOW FACTORS AND EXISTING WASTEWATER FLOWS

LAND USE TYPE	EXISTING 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
Public Facilities	665	550	0.37
Park	227	0	0.00
Aggregate	2	0	0.00
Total	**7,176**	**-**	**7.35**

SOURCE: CITY OF TRACY 2023 WWMPU, TABLE 4.5 WASTEWATER FLOW FACTORS, JULY 2023.

In addition, the same flow factor methodology used to calculate the known development flows shown in Table 3.6-1 were used to calculate infill flows. The resulting projected ADWFs and PWWFs for existing, 2040, and buildout conditions are shown in Table 3.6-2.

TABLE 3.6-2: EXISTING AND PROJECTED ADWF SUMMARY

PLANNING HORIZON	AWDF (MGD)	PPWF (MGD
Existing	7.35	16.95
2040	12.84	25.35
Buildout	15.65	30.14

SOURCE: CITY OF TRACY 2023 WWMPU, TABLES 4.7/4.9 EXISTING AND PROJECTED ADWF SUMMARY/PROJECTED PWWF SUMMARY, JULY 2023.

As mentioned prior, the City of Tracy WWTP treats an ADWF of 7.35 mgd and a PWWF of 16.95 mgd through a treatment train consisting of pretreatment ponds, a screening headworks, primary clarifiers, secondary anoxic selectors, tertiary coagulation and filtration, and chlorine disinfection. Projected average daily flows for the City WWTP for 2040 and buildout conditions are 12.84 mgd and 15.65 mgd, respectively, while PWWFs for the same planning conditions are 25.35 mgd and 30.14 mgd. The projected average BOD loading rate in the Facilities Plan is 46,445 lb/day.

Current improvements to the WWTP outfall pipe are increasing the outfall capacity from 9 mgd to 16 mgd and planned improvements to the aeration basins will increase the secondary treatment capacity from 12.2 mgd to 16.2 mgd. A final designed phase including new effluent piping, a new pipeline diffuser system, new pumps and pump station upgrades, and a new flow meter vault will increase the total WWTP capacity to 16 mgd.

As a result of the Rezone Program and General Plan Amendment, buildout ADWFs are projected to increase to 17.86 mgd and average buildout BOD loading rates are projected to increase to 31,502 lb/day. While the timing of proposed developments may not specifically align with the improvement

phasing presented in the Facilities Plan, both the buildout ADWF (21.1 mgd) and the average buildout BOD load projection (46,445 lb/day) presented in the Facilities Plan encompasses the AWDFs and average loading rates proposed under the Rezone Program and General Plan Amendment. As such, the analyses regarding wastewater treatment capacities presented in the Facilities Plan is valid for the proposed Rezone Program and General Plan Amendment and no additional WWTP improvements are necessary. Therefore, the projected flows of buildout associated with the Housing Rezone Program and General Plan Amendment to accommodate the RHNA allocation for the WQCF are not expected to exceed the treatment capacity available for treatment. The City must also periodically review and update their WQCF Master Plans, and as growth continues to occur within the City of Tracy, the City will identify necessary system upgrades and capacity enhancements to meet growth, prior to the approval of new development.

Given that projected wastewater generation volumes associated with the RHNA allocation buildout of the Housing Rezone Program and General Plan Amendment would not exceed the projected wastewater generation volumes described in the WQCF Master Plan, this impact would be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

Impact 3.6-2: The proposed Project would not have the potential to require or result in the construction of new wastewater treatment or collection facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Buildout associated with the Housing Rezone Program and General Plan Amendment to accommodate the RHNA allocation would result in increased wastewater flows, resulting in the need for additional or expanded wastewater treatment facilities and conveyance infrastructure. The wastewater collection and conveyance system that will serve the buildout associated with the proposed Project will consist of engineered infrastructure consistent with the City's existing infrastructure requirements. Existing facilities have undergone environmental review and have waste discharge permits from the State.

As mentioned prior, the City of Tracy WWTP treats an ADWF of 7.35 mgd and a PWWF of 16.95 mgd through a treatment train consisting of pretreatment ponds, a screening headworks, primary clarifiers, secondary anoxic selectors, tertiary coagulation and filtration, and chlorine disinfection. Projected average daily flows for the City WWTP for 2040 and buildout conditions are 12.84 mgd and 15.65 mgd, respectively, while PWWFs for the same planning conditions are 25.35 mgd and 30.14 mgd.

The City is currently undergoing a series of WWTP upgrades, which has increased its treatment capacity from 6.5 mgd to 10.8 mgd. Currently, the City WWTP capacity is limited by the outfall pipe and loading of the secondary anoxic selectors, both of which are undergoing expansions. Planned improvements to the outfall pipe will increase the outfall capacity from 9 mgd to 16 mgd while planned improvements to the secondary anoxic selectors will increase the secondary treatment capacity from 12.2 mgd to 16.2 mgd. A final phase (phase 2C) has been designed but has not been implemented by the City yet and will include new effluent piping, a new pipeline diffuser system, new pumps and pump station upgrades, and a new flow meter vault, which will increase the WWTP capacity to 16 mgd.

In addition, wastewater treatment and conveyance facilities would be evaluated at the project-level in association with subsequent development projects and will be installed as per the City of Tracy standards and specifications. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this impact would be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

CUMULATIVE IMPACTS

The cumulative setting includes all areas covered in the service areas of the City's wastewater system.

Impact 3.6-3: The proposed Project, in combination with other cumulative development, would not exceed the provider's capacity to serve future projected demand in addition to the provider's existing commitments. (Less than Significant)

As cumulative projects come online within the WWTP service area, the wastewater collection, conveyance, and treatments systems would continue to grow, consistent with the City's existing infrastructure requirements. New sanitary sewer mains could be added as projects are proposed.

As mentioned prior, projected average daily flows for the WWTP for 2040 and buildout conditions are 12.84 mgd and 15.65 mgd, respectively, while PWWFs for the same planning conditions are 25.35 mgd and 30.14 mgd. The City is currently undergoing a series of WWTP upgrades, which has increased its treatment capacity from 6.5 mgd to 10.8 mgd. Planned improvements to the outfall pipe will increase the outfall capacity from 9 mgd to 16 mgd while planned improvements to the secondary anoxic selectors will increase the secondary treatment capacity from 12.2 mgd to 16.2 mgd. A final phase (phase 2C) has been designed but has not been implemented by the City yet

and will include new effluent piping, a new pipeline diffuser system, new pumps and pump station upgrades, and a new flow meter vault, which will increase the WWTP capacity to 16 mgd.

Additionally, the Project's contribution to cumulative impacts would be less than significant. While development facilitated by the Project would result in an increased demand for wastewater collection and treatment, the WWTP can accommodate wastewater collection and treatment generated by such buildout. In addition, future projects within the Tracy Planning Area would be required to comply with requirements of the City's General Plan and Tracy Municipal Code that aim to reduce wastewater generation flows. For the reasons described above, impacts of the Project related to wastewater conveyance and treatment in conjunction with other cumulative development is not cumulatively considerable. This cumulative impact is considered ***less-than-significant*** regarding wastewater treatment capacity.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None required.

3.6.2 WATER SUPPLIES

ENVIRONMENTAL SETTING

The City of Tracy currently serves a population of about 96,000 people. Total potable water production in 2020 was 18,687 acre-feet per year (af/yr), not including water treated and wheeled to the Patterson Pass Business Park, which equates to a per capita water use of about 174 gallons per capita per day (gpcd). This per capita water use is significantly lower than the City's historical per capita water use which was as high as 300 gpcd in the early 1980s. Per capita water use was as low as 144 gpcd in 2015 due to extreme drought conditions which resulted in voluntary and mandatory water conservation. The per capita water use has increased somewhat in recent years as water use restrictions have been lifted and customers have resumed more typical water use behavior.

The following information is contained in the W*ater Supply and Wastewater Treatment Capacity Evaluations* (West Yost Associates, 2024) and the Citywide Water System Master Plan Update, (City of Tracy, 2023). The City's most recently adopted *Urban Water Management Plan* (UWMP) was adopted by the City Council in June 2021. The City's 2020 UWMP included existing and projected water demands for existing and projected future land uses to be developed within the City's Sphere of Influence through 2045. The water demand projections in the City's 2020 UWMP included existing City water demands, future water demands for developments within the existing City limit, and future water demands for future service areas outside the existing City limit.

City of Tracy Water Service

This section presents the City's water service area including history and growth information for the city.

CITY OF TRACY WATER SERVICE AREA

The City of Tracy is located in San Joaquin County, California, about 68 miles south of Sacramento and 60 miles east of San Francisco. The existing incorporated area of the City encompasses approximately 22 square miles. The City's General Plan includes the area outside of the City limits that the City expects to annex and urbanize in the future. It is the expected physical limit of the City based on the most current information. During the City's recent General Plan update process and in response to Local Agency Formation Commission (LAFCo) policies established in 2007, revisions to the City's SOI were made to more accurately reflect locations where the City may grow in the future and locations where no urban growth is expected. The recently adopted revised SOI encompasses an area of approximately 42 square miles and is 20 square miles larger than the current City limits.

The City's water service area is coterminous with the City limits. As future developments within the SOI, but outside the City Limits, are approved, they will be annexed into the City and served by the City water system.

City of Tracy Water Demand

EXISTING AND PROJECTED WATER DEMAND

The City's water demand has increased significantly in the last 30 years. In 1986, the City's water demand was 8,104 af/yr and by 2007 the City's water demand had increased to 19,176 af/yr. In recent years, the City's water demand has decreased as a result of the economic downturn of 2008 through 2011 and water use reductions in response to recent drought conditions. Water demands have rebounded (increased) somewhat in recent years with increased development activity. Table 3.6-3 shows the City's water demand (based on water production) from 2012 to 2020.

TABLE 3.6-3: HISTORICAL POTABLE WATER DEMAND

	2012	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
Total Water Demand (AFY)	18,052	18,587	16,213	14,041	15,360	18,160	17,420	17,672	19,527

SOURCE: CITY OF TRACY 2020 UWMP, TABLE 4-2 CURRENT AND HISTORICAL POTABLE WATER DEMAND AND POPULATION, JUNE 2021.

The City's water demand is anticipated to continue to increase as approved projects build out and new developments are approved and constructed within the City's water service area in accordance with the City's General Plan. However, as discussed above, the rate of growth within the City's water service area has slowed as a result of the GMO and the slow economic recovery from the economic downturn between 2008 and 2011. Hence, water demands are not anticipated to increase as rapidly as they have in past years. Buildout for the City is not anticipated within the planning horizon of the UWMP. However, in the 2020 UWMP and for the purposes of this analysis, buildout is assumed to occur in 2045 to be conservative in the water reliability analysis.

The 2020 UWMP projected water demands, as documented in the City's 2020 UWMP, are shown in Table 3.6-4. The City's projected future water demand was determined based on adopted potable water use factors for various land uses, which were developed based on historical metered water use data, and anticipated timing of future development projects. Buildout of the proposed Project is included in the 2025 (near-term) water demand projection. A detailed explanation of the adopted demand projection methodology is provided in the City's WSMP Update. The water demand projections include consideration for reduced future water use as a result of new building codes, improved water use efficiency, and implementation of water conservation measures. The projections also include savings from passive conservation which refers to water savings resulting from actions and activities that do not depend on direct financial assistance or educational programs from the City. These savings result primarily from: (1) the natural replacement of existing plumbing fixtures with water-efficient models required under current plumbing code standards, and (2) the installation of water-efficient fixtures and equipment in new buildings and retrofits as required under CALGreen Building Code Standards.

TABLE 3.6-4: PROJECTED WATER DEMAND, ACRE-FEET PER YEAR

CONDITION	*2025*	*2030*	*2035*	*2040*	*2045*
Potable Water Demand	20,509	23,100	25,738	28,403	33,079
Recycled Water Demand	1,000	2,067	3,133	4,200	6,300
Total Water Demand	**21,509**	**25,167**	**28,871**	**32,603**	**39,379**

SOURCE: TRACY WATER SUPPLY AND WASTEWATER TREATMENT CAPACITY EVALUATIONS (WEST YOST ASSOCIATES, 2024).

FUTURE WATER SUPPLY SUFFICIENCY

Table 3.6-4 summarizes the projected availability of the City's existing and planned future potable water supplies compared with projected water demands in normal, single dry and multiple dry years at Buildout. To be conservative, water demands were assumed to be at normal levels. With future planned projects implemented, the results of the assessment show that water supply is sufficient during normal years. However, during a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, use of available groundwater supplies, and the proposed future water supply projects to overcome the gap between supply and demand. As described in the City's 2020 UWMP, these findings are primarily due to projected reduced reliability of the City's CVP supplies and SSJID supplies in dry years.

To close the gap between water supply and demand during dry years, the City will need to implement its Water Shortage Contingency Plan to reduce water demands. The City has shown that it can achieve its water conservation goals. During the 2012-2016 statewide drought, the City exceeded its water conservation goals of 25 percent.

Further, the City must fully implement its proposed future water supply projects, including the Recycled Water Distribution Network and Exchange Program and expansion of the aquifer storage and recovery (ASR) Program. Investments in wet year water supplies will also be needed to refill storage with the Semitropic Water Storage District and expand the City's ASR Program. Delays in implementing the proposed future water supply projects could result in greater water supply shortages and the need for additional water conservation to meet demands.

City of Tracy Potable Water Supplies

The City currently receives water from the following sources:

- Untreated surface water from the Central Valley Project (CVP) via the Delta-Mendota Canal (DMC) (treated at the City's John Jones Water Treatment Plant);
- Untreated surface water from the Byron Bethany Irrigation District (BBID) pre-1914 rights (treated at the City's John Jones Water Treatment Plant);
- Surface water from the Stanislaus River via the South County Water Supply Project (SCWSP) (delivered by the South San Joaquin Irrigation District [SSJID]); and
- Groundwater pumped from nine groundwater wells located within the City.

Also, the City has entered into an agreement with the Semitropic Water Storage District for storage of water supplies for use in dry years and has implemented an Aquifer Storage and Recovery (ASR) Program

to allow for injection of surface water supplies into the underlying groundwater basin for storage and later extraction.

SURFACE WATER SUPPLY

Central Valley Project Water via the Delta-Mendota Canal

The City has contractual entitlements for Central Valley Project (CVP) water as detailed below. In the aggregate, the City's contractual entitlement to the municipal and industrial (M&I) reliability CVP water and assignments of agricultural (Ag) reliability water CVP water from the Banta Carbona Irrigation District (BCID) and West Side Irrigation District (WSID) are referred to as the City's "Existing Contract" with the United States Bureau of Reclamation (USBR). The total quantity of CVP water available to the City under its Existing Contract is 20,000 acre-feet per year (af/yr) (10,000 af/yr of M&I-reliability water and 10,000 af/yr of Ag-reliability water).

The City's CVP water supplies are treated at the City's John Jones Water Treatment Plant (JJWTP), which was originally constructed in 1979, expanded in 1988, and then expanded again in 2008. The JJWTP is located just north of the DMC in the southern portion of the City. With the latest plant expansion, the current treatment capacity of the JJWTP is 30 million gallons per day (mgd) which is sufficient to treat all of the City's CVP water supplies.

The City's CVP water supplies are subject to allocations determined by the USBR for 'South-of-Delta' contractors. Based on the historical record, the City's long-term average allocation of CVP water pursuant to the contract is anticipated to be at least 85 percent of the total entitlement. However, due to recent environmental concerns in the Delta and potential future impacts due to climate change, the normal year reliability of CVP water was assumed to be 75 percent in the 2020 UWMP. In addition, the City conservatively estimated that it will receive 50 percent of its Ag-reliability contractual entitlement in normal water years.

During dry years, a CVP M&I contractor is typically eligible for a minimum shortage allocation equal to 75 percent of adjusted historical use. Per the CVP M&I Water Shortage Allocation Plan, the minimum shortage allocation may be reduced further when the allocation of Ag-reliability water in that year is reduced below 25 percent of contract entitlement. The component of the City's CVP supply that carries Ag-reliability is subject to more significant reductions and is much more dependent on yearly hydrologic conditions than the City's M&I-reliability allocation.

Surface Water from BBID Pre-1914 Water Rights

Part of the Tracy Hills Specific Plan area was annexed into the BBID and is entitled to water service from BBID, using BBID's pre-1914 appropriative water rights. This water is delivered to the City via the DMC and is treated at the City's JJWTP before delivery to the Tracy Hills Specific Plan area. The City anticipates that up to 4,500 af/yr of pre-1914 water rights water could be provided by BBID on a year-round basis to serve the Tracy Hills Specific Plan in the BBID service area. However, the volume of water available to the City through this agreement is limited to the demand in the BBID service area portion of the Tracy Hills Specific Plan. The projected potable water demand in this area is estimated to be 3,330 af/yr at Buildout. Because this water supply is based on pre-1914

appropriative rights, the water supply has historically been considered to be firm and well-established; however, recent drought conditions have threatened the reliability of this water supply.[6]

Stanislaus River Water

The City receives Stanislaus River water, in partnership with the cities of Manteca, Lathrop and Escalon, and the SSJID. This partnership constructed the South County Water Supply Project (SCWSP), which consists of the 36 mgd Nick C. DeGroot Water Treatment Plant (DGWTP) near Woodward Reservoir in Stanislaus County and a transmission pipeline to deliver treated surface water to each city. The water supply source for the SCWSP is based on SSJID's senior pre-1914 appropriative water rights to the Stanislaus River, coupled with an agreement with the USBR to store water in New Melones Reservoir.

As part of the SCWSP, the City was initially allocated up to 10,000 af/yr of water based upon SSJID's senior water rights. In 2006, the City entered into a temporary contract with Escalon to purchase Escalon's allocation of 2,015 af/yr of SCWSP supply until Escalon constructs the necessary infrastructure to convey the SCWSP water.[7] In August 2013, SSJID and the cities of Tracy and Lathrop approved a Lathrop-Tracy Purchase, Sale and Amendment Agreement for the sale of a portion of the City of Lathrop's SCWSP supply and capacity to the City of Tracy. The agreement provides the City with an additional 1,120 af/yr of SCWSP supply and 2 mgd of SCWSP capacity. Thus, the City's current contractual amount of SCWSP water is 13,135 af/yr in total. Once the agreement with Escalon sunsets (anticipated to occur in 2025), the City's contractual allocation will be reduced to 11,120 af/yr. This additional SCWSP supply has the same reliability as the City's original SCWSP supplies.

Treated water deliveries from the SCWSP commenced in July 2005, and deliveries have been essentially uninterrupted since then. Although the City's full allocation was available in first few years, deliveries to the City were less than its allocation because the full allocation was not needed. However, in some years since 2009 the City has actually received more than its allocation.

Due to the seniority of the water rights underling the SCWSP, SSJID's pre-1914 appropriative rights to Stanislaus River water, the City has historically assigned a high reliability to SCWSP water. However, in December 2018, the SWRCB released amendments to the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) which included significant changes and could result in significant surface water cutbacks. In its 2020 UWMP, SSJID presented a water reliability analysis assuming that the Bay-Delta Plan Amendment will not be implemented given its uncertainties. As an SSJID retail agency customer, the City relies on SSJID for the reliability projections for the Stanislaus River water supply. Consistent with SSJID's approach, the City's 2020 UWMP assumes that the Bay-Delta Plan

[6] In August 2021, following the June 2021 adoption of the City's 2020 UWMP, the SWRCB issued an initial order imposing water right curtailment and reporting requirements in the Sacramento-San Joaquin Delta watershed that included the curtailment of pre-1914 appropriative water right claims in the San Joaquin River watershed. Based on this August 2021 order, the reliability of BBID's pre-1914 appropriative water rights may be uncertain.

[7] Escalon Amendment to Tracy- SSJID Water Supply Development Agreement, March 2006.

Amendment will not be implemented. However, to fully assess the potential impacts of the Bay-Delta Plan Amendment and better plan for the potential shortfalls, the City conducted a parallel set of reliability analyses assuming that the Bay-Delta Plan Amendment will be implemented and included it as Appendix G of its 2020 UWMP.

Consistent with the City's 2020 UWMP, the City is assumed to receive 100 percent of its SCWSP contractual entitlement in normal years. In future dry years, the City assumed that allocations would be based on the City's contractual entitlement, rather than consumption in a given year. In single dry years, the City expects to receive 76 percent of its SCWSP water supply allocation during 2025, 2030, and 2035 and 56 percent during 2040 and 2045, based on information received from SSJID. In multiple dry years, the City expects to receive 56 to 100 percent of its SCWSP water supply allocation, depending on hydrological conditions. In addition, SCWSP water transferred from Escalon is assumed to be unavailable after 2025[8].

The anticipated availability and reliability of the SCWSP supply under normal years, single dry years and multiple dry years may be revised based on updated evaluations in conjunction with resolutions of issues associated with the Bay-Delta Plan Amendment. Further, SSJID anticipates the likelihood that more water will be available for local purposes in 2040 based on more efficient water management and urban development displacing irrigated agricultural land uses.[9]

GROUNDWATER SUPPLY

The City's surface water supply is supplemented by local groundwater. The City overlies a portion of the San Joaquin Valley Groundwater Basin-Tracy Subbasin (Tracy Subbasin). The City currently operates nine groundwater wells, with a total extraction capacity of about 18,300 gallons per minute (gpm), or 26 mgd (GEI, 2015). Four wells (Production Wells 1, 2, 3 and 4) are located near the City's JJWTP and pump directly into the JJWTP clearwells, where the groundwater is blended with treated surface water. The other wells (Lincoln Well, Lewis Manor Well (Well 5), Park and Ride Well (Well 6), Ball Park Well (Well 7) and Well 8) are located throughout the City and pump water directly into the distribution system after disinfection.

The City's Well 8, located near the intersection of Tracy Boulevard and 6th Street, was designed as an ASR well and is used as an ASR well as permitted by the Central Valley Regional Water Quality Control Board.

The City may sustainably pump up to 9,000 af/yr from the local groundwater basin. Since the hard, high TDS groundwater is of lower quality than the City's surface water sources, the City has scaled back its groundwater extraction in most years. However, the City will continue to rely on groundwater for peaking and drought and emergency water supply. The City anticipates that total extraction during a normal year will be 2,500 af/yr through the planning horizon. By reducing groundwater extraction on an average annual basis, the City will: (1) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and

[8] City of Tracy 2020 UWMP, June 2021, Section 7.1.1.3.
[9] City of Tracy 2020 UWMP, June 2021, Section 7.1.1.2.

repair caused by the lower-quality groundwater; and (2) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., effectively "banking" groundwater). The City's groundwater supplies are considered to be 100 percent reliable.

Basin Description. The City overlies the Tracy Subbasin (Basin; Department of Water Resources [DWR] 5-22.15) of the San Joaquin Valley Groundwater Basin (DWR 5-22). The Tracy Subbasin is not adjudicated, and it is not in a condition of critical overdraft.

The Tracy Subbasin covers an area of approximately 373 square miles. It is bounded on the northwest by the Old River south to the tri-county confluence point and on the south by the Clifton Forebay where it then follows the Contra Costa-Alameda County line to the foothills of the Coastal Range mountains. The northeast boundary follows the San Joaquin River south to the San Joaquin County Line with a slight jog to include the City of Lathrop on the west side of the river. The southern border of the Subbasin generally follows the San Joaquin-Stanislaus County line, with some irregular areas belonging to the Delta-Mendota Subbasin to the south. The western border follows the Coastal Range foothills from the San Joaquin-Stanislaus County line; north to the Contra Costa-Alameda County line. The Subbasin is a mix of Delta islands (mostly agriculture) and waterways along with urban and agricultural communities on the southern edge.

Adjacent to the Tracy Subbasin are the Eastern San Joaquin Subbasin to the east, the Delta-Mendota Subbasin to the south, and the Sacramento Valley Groundwater Basin to the north. The three subbasins, not including the Sacramento Valley Groundwater Basin, are part of the San Joaquin Valley Groundwater Basin. The San Joaquin River and one of its major west side tributaries, Corral Hollow Creek, provide drainage from the Tracy Subbasin. The San Joaquin River flows northward into the Sacramento and San Joaquin Delta and discharges into San Francisco Bay. The Tracy Subbasin is comprised of continental deposits of Late Tertiary to Quaternary age. These deposits include the Tulare Formation, Older Alluvium, Flood Basin Deposits, and Younger Alluvium. The cumulative thickness of these deposits increases from a few hundred feet near the Coast Range foothills on the west to about 3,000 feet along the eastern margin of the subbasin.

Aquifer Storage and Recovery (ASR). The City has been implementing an ASR Program to store surplus treated surface water in the confined aquifer beneath Tracy and extract that water to meet peak demands or supplement surface water sources during dry years. The City has one former groundwater extraction well, Well 8, which has been operated as an ASR well since 2013. Well 8 is located near the intersection of Tracy Boulevard and 6th Street and penetrates the Lower Tulare Formation.

The recharge water source of the City's ASR Program is treated SCWSP water. The City's SCWSP water supply is of exceptionally high water quality, with a Total Dissolved Solids (TDS) concentration of approximately 64 milligrams per liter (mg/L). Since the TDS concentration of the recharge water source is much lower than that of the Lower Tulare Formation aquifer's native groundwater, operation of the City's ASR Program reduces the localized salinity of the aquifer, resulting in lower TDS content in water supplies extracted from Well 8 than would be expected in the absence of the ASR Program. Additionally, the reduced salinity in groundwater recovered from Well 8 results in

lower salt loading at the City's WWTP, which eventually reduces the salinity of effluent from the WWTP. This helps the City meet its Regional Water Quality Control Board (RWQCB) effluent salinity requirements and provides environmental benefits to the river ecosystems.

Injection of SCWSP water into the ASR well occurs during the winter months (i.e., November through April), when City demands are low. Extraction occurs primarily in the summer months to meet increased demands associated with irrigation needs, and as needed during droughts and water shortage emergencies. It is estimated that between 685 AFY and 915 AFY of potable water could be injected into the aquifer, assuming a 5-month continuous injection rate of 1.5 mgd to 2.0 mgd at Well 8. The City's strategic plan for ASR operations at Well 8 involves injecting up to 1,000 AFY over six months during the winter and extracting 75 percent of the injection volume during the following summer. These operations would result in net injection into the Lower Tulare Formation aquifer, which will gradually create a "buffer supply" that the City can utilize in dry years or during water shortage emergencies. In 2020, a net volume of approximately 190 af was injected and stored at Well 8 for the following year.

The City plans to implement its ASR Program stages as new ASR wells are constructed. The ASR supply will be available to meet demands in dry years, thereby increasing the reliability of the City's water supply during drought conditions or water shortage emergencies.

Semitropic Groundwater Storage. The City has acquired the rights to store and recover water in the Semitropic Groundwater Storage Bank (Semitropic) operated by the Semitropic Water Storage District (Semitropic WSD). The Semitropic facilities are located in Kern County alongside the California Aqueduct and the DMC. The first phase of Semitropic was initiated in the early 1990s and established one million acre-feet of storage for a group of agencies referred to as the Original Banking Partners. In response to increased demand for banking capacity, up to 650,000 af of additional storage was created for the Stored Water Recovery Unit (SWRU). When an agency purchases storage capacity in Semitropic, it is able to recover the volume of water it has banked over a period of three consecutive years (i.e., 3,000 af equates to a maximum recovery rate of 1,000 AFY for three years). The City originally entered into a pilot agreement with Semitropic WSD in June 2006 for 1,000 af of water storage in Semitropic's SWRU. The pilot agreement was intended to establish the procedures for water deposits and withdrawals by the City and was terminated when the permanent agreement was implemented. In 2012, the City entered into a long-term agreement with Semitropic WSD for up to 10,500 af of storage volume. This storage agreement allows the City to withdraw up to 3,500 af of water annually for three years. To store water in Semitropic, the City withdraws less than its available allocation of CVP water from the DMC. This water travels through the DMC where it is diverted by Semitropic and used for local groundwater recharge. When the City wishes to withdraw water that it has banked previously, Semitropic arranges for the City to divert CVP water beyond its allocation from the DMC. This source of water is provided through either an exchange of Semitropic WSD's contractual entitlement to State Water Project (SWP) water or through direct "pump back" of stored groundwater into the California Aqueduct by Semitropic WSD.

Though the City could utilize this supply in any year, it is most valuable during extended drought years when the City's surface water supplies are reduced. The City anticipates that banking water at Semitropic will increase the reliability of the City's water supply and help close the potential future

gap between supply and demand during drought conditions or other water supply shortage emergencies. If the City uses water from the Semitropic water bank in any given year, it would manage its supplies during subsequent years such that it could refill the water bank for future use. The City plans to actively maintain storage in Semitropic as feasible.

As of December 2020, the City had 6,887 af of water in storage at Semitropic.

Groundwater Yield. A 1990 Kennedy/Jenks/Chilton (K/J/C) study estimated a perennial groundwater yield of 6,700 af/yr in the Tracy Subbasin within the Tracy Study Area. However, in 2001, to determine if additional groundwater resources were available in the Tracy Study Area, the City conducted an updated groundwater analysis. The Estimated Groundwater Yield Study, prepared by Bookman-Edmonston Engineering, provided an evaluation of potential groundwater yield and determined that a 2,300 af/yr increase of the average annual operational groundwater yield above the groundwater yield recommended in the 1990 K/J/C study could be provided within the estimated sustainable yield of the Tracy Subbasin in the Tracy Study Area, without adverse impact to groundwater resources or quality in the Tracy Study Area over a 50-year timeframe. This expansion of groundwater usage to 9,000 af/yr would be within the City's estimated share of the aquifer's sustainable yield of 22,000 af/yr of the 28,000 af/yr total (which includes groundwater usage within West Side Irrigation District, Naglee-Burk Irrigation District, Plain View Water District (now part of the BBID), and BCID). It was also estimated that this expansion of groundwater usage would result in a groundwater level drop of 10 feet but would stabilize at this level.

In 2015, the City hired GEI Consultants (GEI) to perform an assessment on what the effects would be if the City were to pump between 16,000 af/yr and 22,000 af/yr for a single year to meet its demands during a drought emergency when no surface water supplies were available. The assessment considered potential impacts on groundwater levels, groundwater quality, and land subsidence. GEI's approach to this assessment was to estimate drawdown beneath the City, including drawdown caused by well interference, under scenarios wherein all of the City's wells were pumped for a single year at rates needed to meet the above stated demands. Drawdown estimates were made using analytical methods and aquifer hydraulic property data from pumping tests performed at two of the City's wells. Results showed that the City does have capacity to pump its wells to meet these single dry year demands, but that drawdown in the City wells and at locations proximate to the City would exceed that which has been historically observed. GEI (2015) estimated that groundwater levels would recover from their drawdown within approximately seven years.[10]

Groundwater Quality. Groundwater quality in the Tracy Subbasin varies spatially and with depth. In general, the northern part of the Tracy Subbasin is characterized by a sodium water type, and the southern part of the Tracy Subbasin is characterized by calcium-sodium type water. The northern part of the Tracy Subbasin is also characterized by a wide range of anionic water types, including bicarbonate; chloride; and mixed bicarbonate-chloride. Major anions in the southern part of the Tracy Subbasin include sulfate-chloride and bicarbonate-chloride.

[10] GEI Consultants, 2015. As cited in City of Tracy, 2023. Citywide Water System Master Plan Update. West Yost Associates. May. p. 5-11.

One water quality concern that the City actively manages is Total Dissolved Solids (TDS). The City's groundwater supply typically meets the primary maximum contaminant level (MCL) of 1,000 milligrams per liter (mg/L) but frequently exceeds the secondary MCL of 500 mg/L. In 2019, the City's groundwater supply ranged from 386 to 876 mg/L of TDS, with an average concentration of 752 mg/L. Because the TDS concentrations are significantly higher in the groundwater supply than in the City's other water supply sources, in order to meet the secondary MCL in its overall water supply, the City typically scales back its groundwater production from its estimated sustainable yield of 9,000 af/yr, particularly in normal rainfall years.

Historical Groundwater Use. The City currently operates eight groundwater extraction wells and one ASR well. The total production capacity of all of the wells combined is 28.2 mgd, which would equate to a total annual production capability of about 31,600 af/yr if the wells were pumped continuously; however, as described above, the City's maximum annual groundwater extraction rate has been established to be 9,000 af/yr. The City's groundwater production over the last several years is provided in Table 3.6-5.

TABLE 3.6-5: HISTORICAL GROUNDWATER PRODUCTION, AFY

	2012	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*	*2020*
Total Groundwater Production (AFY)	252	515	680	519	648	995	817	645	1,181

SOURCE: CITY OF TRACY 2020 UWMP, TABLE 5-1, CURRENT AND HISTORICAL WATER SUPPLY.

Project Future Groundwater Use. The City may sustainably pump up to 9,000 AFY from the local groundwater basin. Since the hard, high TDS groundwater is of lower quality than the City's surface water sources, the City has scaled back its groundwater extraction in most years. However, the City will continue to rely on groundwater for peaking and drought and emergency water supply.

The City anticipates that total extraction during a normal year will be 2,500 af/yr. By reducing groundwater extraction on an average annual basis, the City will: (1) increase the overall quality of its drinking water, thus increasing customer satisfaction and reducing system maintenance and repair caused by the lower-quality groundwater; and (2) recharge the underlying aquifer, effectively increasing the availability of groundwater during a drought or emergency condition (i.e., effectively "banking" groundwater). Table 3.6-6 shows the anticipated future groundwater production during a normal year and during dry years.

TABLE 3.6-6: PROJECTED FUTURE GROUNDWATER PRODUCTION IN NORMAL AND DRY YEARS, AFY

	2020	*2025*	*2030*	*2035*	*2040*	*2045*
Total Groundwater Production During a Normal Year (AFY)	2,500	2,500	2,500	2,500	2,500	2,500
Total Groundwater Production During Dry Years (AFY)	4,500	4,500	4,500	4,500	4,500	4,500

SOURCE: CITY OF TRACY 2020 UWMP, TABLE 7-2, PROJECTED POTABLE WATER SUPPLY IN NORMAL YEARS.

As can be seen in Table 3.6-6, the City anticipates that total extraction during a normal year will be 2,500 AFY through the planning horizon. The projected use of groundwater during dry years is about 4,500 af/yr and is consistent with the City's Groundwater Management Policy. In the event that the

City is unable to secure additional high-quality surface water supplies in the future, the City is able to expand groundwater production up to 9,000 af/yr. In the event of a severe water supply shortage or emergency, the City has the ability to increase production dramatically, up to 22,000 af/yr. At the production volumes shown in Table 3.6-6, the City's groundwater supplies are considered to be 100 percent reliable.

Potable Water Supply Availability and Reliability

The City's surface water and groundwater supply reliability as described in the City's Citywide Water System Master Plan is summarized below.

The reliability of each of the City's existing and additional planned water supplies and their projected availability during normal, single dry, and multiple dry years as described in the City's Citywide Water System Master Plan, is described below and summarized in Table 3.6-7.

TABLE 3.6-7: SUMMARY OF BUILDOUT TOTAL WATER SUPPLY VERSUS DEMAND DURING HYDROLOGIC NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS, AFY

HYDROLOGIC CONDITION		*SUPPLY AND DEMAND COMPARISON, AF/YR*
Normal Year		
Available Total Water Supply		40,168
Total Water Demand		39,379
	Potential Surplus (Deficit)	789
	Percent Shortfall of Demand	-
Single Dry Year		
Available Total Water Supply		30,259
Total Water Demand		39,379
	Potential Surplus (Deficit)	(9,120)
	Percent Shortfall of Demand	23.0%
Multiple Dry Years		
Year 1	Available Total Water Supply	35,292
	Total Water Demand	39,379
	Potential Surplus (Deficit)	(4,087)
	Percent Shortfall of Demand	10.4%
Year 2	Available Total Water Supply	37,014
	Total Water Demand	39,379
	Potential Surplus (Deficit)	(2,365)
	Percent Shortfall of Demand	6.0%
Year 3	Available Total Water Supply	32,071
	Total Water Demand	39,379
	Potential Surplus (Deficit)	(7,308)
	Percent Shortfall of Demand	18.6%
	Available Total Water Supply	32,071

Year 4	Total Water Demand	39,379
	Potential Surplus (Deficit)	(7,308)
	Percent Shortfall of Demand	18.6%
Year 5	Available Total Water Supply	37,014
	Total Water Demand	39,379
	Potential Surplus (Deficit)	(2,365)
	Percent Shortfall of Demand	6.0%

SOURCE: TRACY WATER SUPPLY AND WASTEWATER TREATMENT CAPACITY EVALUATIONS, TABLE 5-14 (WEST YOST ASSOCIATES, 2024).

NORMAL YEARS

Normal or wet water years are those that match or exceed median rainfall and runoff levels. The reliability of each of Tracy's existing and future water supplies and their projected availability during normal and wet years is described below:

- The City's contract with the USBR for 10,000 af/yr of DMC/CVP water is subject to M&I reliability. Based on the historical record, the City's long-term average allocation of DMC/CVP water pursuant to this contract is anticipated to be at least 85 percent of the total entitlement. However, due to recent environmental concerns in the Delta and potential future impacts due to climate change, the normal year supply of DMC/CVP M&I water is assumed to be 75 percent of the City's historical use. Based on a historical use of 5,930 af/yr (i.e., the average quantity of CVP water put to beneficial use by the City during the last three years of water deliveries that were unconstrained by the availability of CVP water), the projected normal year supply is 4,448 af/yr.

- The City has received acquired assignments from Banta-Carbona Irrigation District (BCID; 5,000 af/yr) and West Side Irrigation District (WSID; 5,000 af/yr) for a total entitlement of 10,000 af/yr of DMC/CVP water. These supplies are subject to Ag-reliability. The City is conservatively estimating that it will receive 50 percent of its Ag-reliability contractual entitlement, or 5,000 af/yr, in normal years.

- The City has acquired up to 4,500 af/yr of pre-1914 appropriative water rights water from BBID. These supplies are restricted in their place of use, and therefore the supply is anticipated to be equal to the projected demand within that place of use (i.e., the Tracy Hills area) ranging from 800 af/yr in 2025 to 3,300 af/yr in 2045. The City anticipates being able to receive 100 percent of this supply in normal years.

- The City has a total contractual entitlement of 13,135 af/yr of Stanislaus River water provided through the SCWSP, including 10,000 af/yr from its original contract with SSJID, 1,120 af/yr purchased from Lathrop, and 2,015 af/yr purchased on an interim basis from Escalon. The agreement between Tracy and Escalon is assumed to terminate after 2025. Based on information provided by SSJID, the City expects to receive 100 percent of its SCWSP water supply allocation during a normal water year. As such, the City anticipates being able

to receive 13,135 af/yr of SCWSP supply in 2025 and 11,120 af/yr afterwards, assuming normal year conditions.

- The City is able to withdraw up to 9,000 af/yr of groundwater from the Tracy Subbasin. However, due to the aging infrastructure and water quality issues in the City's groundwater supplies, the City is projecting to be able to withdraw up to 2,500 af/yr in normal years. This groundwater supply is considered to be 100 percent reliable.
- The City does not anticipate using its Semitropic water or ASR water in normal years.
- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 af/yr in 2030 to 7,500 af/yr in 2045. This water supply is considered to be 100 percent reliable.
- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 af/yr of recycled water supply in 2025, increasing to 6,300 af/yr in 2045.

SINGLE DRY YEARS

During a single dry year, all of the City's existing surface water allotments are subject to some level of reduction. Assumed reductions are based on actual reductions in CVP deliveries experienced in the recent drought and the new USBR M&I Reliability Policy adopted in 2017. The actual reductions will vary with the severity of the regional water supply shortage and climatic conditions, and the consideration of contract agreements.

The following describes the availability and reliability of the City's existing and additional planned future water supplies under single dry year conditions:

- The City's contract with the USBR for 10,000 af/yr of DMC/CVP water is subject to M&I reliability. During a single dry year, the City estimates to receive 25 percent of the City's historical use. Based on the historical use of 5,930 af/yr, the projected supply is 1,483 af/yr.
- The City has a total entitlement of 10,000 af/yr of DMC/CVP Ag-reliability water. The City anticipates receiving 0 percent of its DMC/CVP Ag-reliability water in a single dry year.
- The City has acquired up to 4,500 af/yr of pre-1914 appropriative water rights water from BBID. This supply is restricted with regard to the place of use (Tracy Hills). The City anticipates being able to receive 85 percent of its contractual entitlement in a single dry year (3,825 af/yr). As the projected demand is 3,300 af/yr in 2045 and is lower than the 3,825 af/yr of available supply, the reduction in reliability does not result in a reduction to

actual amount of water used. Therefore, the supply in a single dry year is anticipated to be equal to the projected demand within the Tracy Hills area, ranging from 800 af/yr in 2025 to 3,300 af/yr in 2045.

- The City has a total contractual entitlement of 13,135 af/yr of Stanislaus River water provided through the SCWSP. Based on information provided by SSJID, the City expects to receive 76 percent of its SCWSP water supply allocation during 2025, 2030, and 2035 and 56 percent during 2040 and 2045. In addition, the SCWSP water transferred from Escalon is assumed to be unavailable after 2025. As such, the City estimates 9,974 af/yr of SCWSP supply in 2025, 8,444 af/yr in 2030 and 2035, and 6,177 af/yr afterwards.

- During a single dry year, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 af/yr to 4,500 af/yr. The groundwater supply is considered to be 100 percent reliable.

- The City anticipates that 700 af/yr of water will be available for use in a single dry year through operation of its ASR well. An additional 300 af/yr is estimated to be available by 2040 for a total of 1,000 af/yr. This water supply is considered to be 100 percent reliable assuming that the City is consistently able to refill the ASR storage during non-drought years to maintain at least 1,000 af in storage at the beginning of a single dry year.

- The City has acquired 10,500 af/yr of storage in Semitropic, which allows the City to withdraw up to 3,500 af/yr for three consecutive years. Due to the difficulties experienced by the City in accessing stored water via the DMC on a short timeframe, the City has conservatively assumed that the Semitropic water will not be available in a single dry year.

- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 af/yr in 2030 to 7,500 af/yr in 2045. This water supply is considered to be 100 percent reliable.

- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 af/yr of recycled water supply in 2025, increasing to 6,300 af/yr in 2045.

MULTIPLE DRY YEARS

During multiple dry years, the City's surface water supplies (from both the CVP and SCWSP) may be significantly reduced. Thus, in the event of drought, the City will have to depend more heavily on conservation efforts, groundwater, and the proposed future supply projects.

The following describes the availability and reliability of the City's existing and additional planned future water supplies under multiple dry year conditions:

- The City's contract with the USBR for 10,000 af/yr of DMC/CVP water is subject to M&I reliability. During multiple dry years, the City estimates that it will receive 40 percent of the City's historical use. Based on the historical use of 5,930 af/yr, the projected supply is 2,372 af/yr.

- The City has a total entitlement of 10,000 af/yr of DMC/CVP Ag-reliability water. The City anticipates receiving 0 percent of its DMC/CVP Ag-reliability water in multiple dry years.

- The City has acquired up to 4,500 af/yr of pre-1914 appropriative water rights water from BBID. This supply is restricted with regard to the place of use (Tracy Hills). The City anticipates being able to receive 85 percent of its contractual entitlement in multiple dry years (3,825 af/yr). As the projected demand is 3,300 af/yr in 2045 and is lower than the 3,825 af/yr of available supply, the reduction in reliability does not result in a reduction to actual amount of water used. Therefore, the supply in multiple dry years is anticipated to be equal to the projected demand within the Tracy Hills area, ranging from 800 af/yr in 2025 to 3,300 af/yr in 2045.

- The City has a total contractual entitlement of 13,135 af/yr of Stanislaus River water provided through the SCWSP. Based on information provided by SSJID, the City's SCWSP water supply reliability during multiple dry years range from 56 to 100 percent. In addition, the SCWSP water transferred from Escalon is assumed to be unavailable after 2025.

- During multiple dry years, the City anticipates increasing its groundwater production on a short-term basis from the normal year production of 2,500 af/yr to 4,500 af/yr. The groundwater supply is considered to be 100 percent reliable.

- The City anticipates that 700 af of water will be available for use in multiple dry years through operation of its ASR well. An additional 300 af is estimated to be available by 2040 for a total of 1,000 af. The City is assumed to be unable to refill the ASR storage during multiple dry years. Therefore, the annual ASR supply available is assumed to equal one fifth of the total stored volume (i.e., 140 af/yr between 2025 and 2035 and 200 af/yr between 2040 and 2045). This water supply is considered to be 100 percent reliable assuming that the City is consistently able to refill the ASR storage in non-drought years to maintain at least 1,000 af in storage at the beginning of a multiple dry year sequence.

- The City has acquired 10,500 af/yr of storage in Semitropic, which allows the City to withdraw up to 3,500 af/yr for three consecutive years. Due to the difficulties experienced by the City in accessing stored water via the DMC on a short timeframe, the City has conservatively estimated that the 0 percent of the City's storage will be available in the first year of a five-consecutive-year drought, and 100 percent will be available over the following four years. Based on the City's current storage at Semitropic of 6,887 af, the amount available in the second to fifth year of a five-consecutive-year drought is assumed to be 1,722 af/yr (6,887 af divided by four). A similar reliability estimate is provided for all dry-

year sequences under the assumption that the City is consistently able to re-fill the water bank in non-drought years to maintain at least 7,000 af/yr in storage at the beginning of a multiple dry year sequence.

- The City anticipates that a Recycled Water Distribution Network and Exchange agreement will be executed with the USBR by 2030 to provide additional CVP supplies to the City in exchange for the City discharging a like amount of tertiary-treated recycled water to the DMC. The City assumes that the Recycled Water Distribution Network and Exchange will be implemented as needed to meet future demand conditions and is currently projected to supply an amount ranging from 1,925 af/yr in 2030 to 7,500 af/yr in 2045. This water supply is considered to be 100 percent reliable.

- The City's recycled water supply is expected to be 100 percent reliable. Based on the projected non-potable demands and assuming that the City makes investments in infrastructure and permitting, the City estimates that they will have access to 1,000 af/yr of recycled water supply in 2025, increasing to 6,300 af/yr in 2045.

Planned Infrastructure Updates

In addition to the City's existing potable water supplies described above, the City has additional planned future potable water supplies to meet the City's existing and projected future water demands. The City anticipates implementation of the following projects for additional future potable water supplies:

- ASR Program Expansion;
- Recycled Water Distribution Network and Exchange Program for Additional CVP Water Supplies.

As described above, the City currently has one ASR well (Well 8) which allows the City to inject excess SCWSP water supplies into the groundwater basin for later extraction when needed. The current injection and extraction capacity is 700 af/yr. The City is planning to expand the ASR Program with the installation of additional ASR wells. According to the City's WSMP Update, the City's ASR Program will be expanded to provide up to 1,000 af/yr of water supplies from the existing and new ASR wells by 2040. The ASR supply will be used to meet demands during dry years, thereby increasing the reliability of the City's water supply and helping to close the potential gap between supply and demand during drought conditions or water shortage emergencies.

One constraint with the City's ASR Program is that the City's current ASR permit only allows for SCWSP water to be injected. This means that the City has to shut down the JJWTP and the groundwater wells during the injection period so that only SCWSP supplies are being utilized. A potential alternative to avoid this operational restriction, if the City's ASR permit cannot be modified to allow for other water supplies to be injected, would be to construct a dedicated SCWSP water pipeline to the ASR well(s). Future expansion of the ASR Program will need to fully evaluate these operational restrictions and potential alternatives.

The City is evaluating indirect reuse of its recycled water through an exchange agreement with the USBR, where a portion of the City's recycled water would be discharged into the DMC, and a like amount of water would be diverted from the DMC for treatment at the JJWTP for potable use. This project is considered an essential part of the City's projected future water supply portfolio as it provides the following multiple benefits:

- Provides for the beneficial use of recycled water;
- Provides an additional potable water supply for the City;
- Improves water supply reliability and reduces the City's dependence on other imported supplies;
- Builds on the existing wastewater and recycled water infrastructure;
- Reduces salt loading in the Delta as USBR has to release additional water from the New Melones Reservoir to meet Delta salinity standards.

The Recycled Water Distribution Network and Exchange Program would require development of a project description, National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) review, an exchange agreement with the USBR, and design and construction of a new recycled water pipeline to discharge recycled water to the DMC downstream of the City's JJWTP intake. Assuming such a project is implemented, the City expects that it would initially provide an estimated 1,925 af/yr of potable water, and future expansion of the program could be implemented as needed to meet future demands up to 7,500 af/yr. This supply would be 100 percent reliable and would not be subject to drought cutbacks.

The City has invested in infrastructure to produce and deliver recycled water. The City's WWTP has sufficient treatment capacity to produce approximately 9.0 mgd of tertiary-treated recycled water meeting the Title 22 requirements, which can be reused for landscape irrigation and other non-potable uses. The City's current recycled water system consists of a pump station at the WWTP and approximately 7.6 miles of recycled water transmission line from the WWTP west to Lammers Road and south to West Schulte Road.

The City is planning to expand the existing recycled water system to serve future development areas, as well as a small number of existing parks and irrigated areas. New developments in the City are required to include recycled water distribution systems in accordance with the City's Recycled and Non-Potable Water Ordinance (Tracy Municipal Code, Chapter 11.30). The City's Department of Utilities and Development Services are coordinating planning efforts to connect existing water customers and new development to recycled water.

The City intends to expand the existing recycled water system to serve non-potable water demands in most of the new development areas. The future recycled water use was estimated to be 1,000 af/yr in 2025, increasing to 6,300 af/yr in 2045 as new development areas build out, based on the adopted unit water demand factors and the future dwelling units or gross acreage.

Several future service areas already have recycled water distribution pipelines installed by developers, including Cordes Ranch, Ellis Specific Plan Phase 1, and Tracy Hills Phase 1. These pipelines are not yet connected to the recycled water mains, but instead are temporarily connected

to the potable water system to meet irrigation demands. Once recycled water system construction is complete and the appropriate permitting is completed, the pipelines will be connected to the recycled water system and the temporary connections to the potable water system will be removed.

In March 2022, DWR awarded the City a $20 million grant through the Urban and Multi-benefit Drought Relief Grant Program for expansion of the City's recycled water system, including additional recycled water distribution pipelines and pump stations.

REGULATORY SETTING

Safe Drinking Water Act

The federal Safe Drinking Water Act as passed in 1947 and amended in 1986 and 1996 is the Country's primary law regulating drinking water quality and is implemented by the United States Environmental Protection Agency (US EPA). The Safe Drinking Water Act authorizes the US EPA to set national health-based standards for drinking water and requires actions to protect drinking water and its sources. Additionally, it provides for treatment, monitoring, sampling, analytical methods, reporting, and public information requirements. Implementation of the Act, in California, is under the jurisdiction of the California Department of Public Health (CDPH), Division of Drinking Water and Environmental Management. Drinking Water regulations are set forth in the California Code of Regulations (CCR), Titles 7 and 22.

Water Conservation Projects Act

California's requirements for water conservation are codified in the Water Conservation Projects Act of 1985 (Water Code Sections 11950 – 11954).

Consistent with California Water Code Sections 11950 – 11954, the City has implemented various water conservation efforts, as well as Water Shortage Contingency Plan that identifies actions that can be taken to respond to catastrophic interruption of water supply.

Senate Bills (SB) 610 and 221, Water Supply Assessment and Verification

Senate Bill (SB) 610 and SB 221 amended State law to ensure better coordination between local water supply and land use decisions and confirm that there is an adequate water supply for new development. Both statutes require that detailed information regarding water availability be provided to city or County decision-makers prior to approval of large development projects. SB 610 requires the preparation of a Water Supply Assessment (WSA) for certain types of projects, as defined by Water Code Section 10912, which are subject to the CEQA. Projects required to prepare a WSA are defined as follows:

- Residential development of more than 500 dwelling units.
- Shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor area.
- Hotel or motel, or both, having more than 500 rooms.

- Industrial, manufacturing or processing plant, or industrial park planned to employ more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- Mixed-use project that includes one or more of the projects specified above.
- Project that would demand an amount of water equivalent to, or greater than, the amount of water required for 500 dwelling units.

SB 221 establishes consultation and analysis requirements related to water supply planning for residential subdivisions including more than 500 dwelling units. The water supplier must provide written verification that sufficient water is available for a project before construction begins. The document used to determine compliance with both SB 610 and SB 221 is the adopted UWMP.

California Model Water Efficient Landscape Ordinance

The Water Conservation in Landscaping Act was enacted in 2006, requiring the DWR to update the Model Water Efficient Landscape Ordinance (MWELO). In 2009, the Office of Administrative Law (OAL) approved the updated MWELO, which required a retail water supplier or a county to adopt the provisions of the MWELO by January 1, 2010, or enact its own provisions equal to or more restrictive than the MWELO provisions. Because the City of Tracy is a "local agency" under the MWELO, it must require "project applicants" to prepare plans consistent with the requirements of MWELO for review and approval by the City.

The MWELO applies to new construction with a landscape area greater than 2,500 square feet. The MWELO "highly recommends" use of a dedicated landscape meter on landscape areas smaller than 5,000 square feet, and requires weather-based irrigation controllers or soil-moisture based controllers or other self-adjusting irrigation controllers for irrigation scheduling in all irrigation systems. The MWELO provides a methodology to calculate total water use based upon a given plant factor and irrigation efficiency.[11] Finally, the MWELO requires the landscape design plan to delineate hydrozones (based upon plant factors) and then to assign a unique valve for each hydrozone (low, medium, high water use).

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to utilities and public services. General Plan policies applicable to the Project are identified below:

POLICIES: PUBLIC FACILITIES ELEMENT

- PF-6.1-P1. The City shall promote water conservation by implementing the Best Management Practices contained in the Urban Water Management Plan.

[11] In calculating Estimated Total Water Use, the MWELO requires use of at least a 71% irrigation efficiency factor. Assuming 71% irrigation efficiency, the average plant factor must be 0.50. It would be possible to stay within the water budget if the average plant factor were higher than 0.50 by designing a system with an irrigation efficiency higher than 71%. The relationship between a Plant Factor (PF) and Irrigation Efficiency (IE) in the Applied Water formula is: AW=(ETo*PF)/IE.

- PF-6.1-P2. The City shall continue to acquire additional sources of water supplies to meet the City's future demands.
- PF-6.1-P3. To the extent feasible, the City shall use surface water supplies to meet daily water needs and reduce reliance on groundwater supplies.
- PF-6.1-P4. The City shall establish water demand reduction standards for new development and redevelopment to reduce per capita and total demand for water.
- PF-6.2-P1. The City shall maintain water storage, conveyance and treatment infrastructure in good working condition in order to supply domestic water to all users with adequate quantities, flows and pressures.
- PF-6.2-P2. Storage reservoirs should be buried or partially buried depending on local groundwater conditions to allow for the joint use of the site with parks or recreational facilities, unless reservoirs are elevated to provide a gravity flow system, in which case the reservoirs shall be screened by landscaping and/or earthen berms.
- PF-6.3-P1. Structures with plumbing that are located within the City limits shall connect to the City water supply system.
- PF-6.3-P2. New developments shall dedicate land for utility infrastructure such as treatment facilities, tanks, pump stations and wells as needed to support the development of their project.
- PF-6.3-P3. The City shall be responsible for constructing new transmission water lines, as needed to meet future needs. Individual development projects shall be responsible for the construction of all water transmission means.
- PF-6.3-P4. All new water facilities shall be designed to accommodate expected capacity for buildout of areas served by these facilities but may be constructed in phases to reduce initial and overall costs.
- PF-6.3-P5. The availability of sufficient, reliable water shall be taken into account when considering the approval of new development.
- PF-6.3-P6. Costs for water service expansion shall be distributed among new water users fairly and equitably.
- PF-6.4-P1. Groundwater supplies should be reserved for emergency use during water treatment shutdowns, short-term shortages of surface water supplies or during droughts.
- PF-6.4-P2. Backup emergency power systems shall be provided at all essential water facilities that rely on electric power.
- PF-6.4-P3. Storage reservoir facilities should be located at naturally high topographic locations to capitalize on gravity flow, whenever possible.
- PF-6.4-P4. Future water systems and facilities shall be designed to minimize the likelihood of damage from vandalism or terrorist activity.
- PF-6.5-P1. The City shall provide recycled water systems, including pipelines, pump stations and storage facilities, to serve primarily City-owned facilities, schools and parks as funding becomes available.
- PF-6.5-P2. Recycled water piping systems ("purple pipe") shall be constructed as appropriate in all new development projects to facilitate the distribution and use of recycled water. The specific location and size of the recycled water systems shall be determined during the development review process.

- PF-6.5-P3. Recycled water shall be used for all public properties and large private open spaces or common areas to the extent feasible.
- PF-654-P4. The City shall plan for recycled water infrastructure in the City's Infrastructure Master Plans and, to the extent feasible, recycled water should be utilized for nonpotable uses, such as landscape irrigation, dust control, industrial uses, cooling water and irrigation of agricultural lands.

Utility Master Plans

The City of Tracy maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include: *Urban Water Management Plan* (2020), Citywide *Water System Master Plan* (2024), Citywide *Storm Drainage Master Plan* (2022) *Wastewater Master Plan* (2023), and the *Citywide Public Facilities Master Plan* (2024).

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project may have a significant impact on the environment associated with Utilities if it would:

- Require or result in the relocation or construction of new or expanded water treatment facilities, the construction of which could cause significant environmental effects; or
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-4: The proposed Project would not require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

The provision of public services and the construction of onsite infrastructure improvements will be required to accommodate the development of the Buildout associated with the Housing Rezone Program and General Plan Amendment to accommodate the RHNA allocation. Furthermore, development and growth in the City under the proposed buildout would result in increased demand for water supplies, including water conveyance and treatment infrastructure. Water distribution will be installed as per the City of Tracy standards and specifications.

It is anticipated that water supply infrastructure will need to be extended to serve future development. Future development in the City of Tracy would be required to connect to existing water distribution infrastructure in the vicinity of each site, pay the applicable water system connection fees, and pay the applicable water usage rates. Future projects may be required to implement site specific and limited off-site improvements to the water distribution system in order to connect new project sites to the existing water infrastructure network.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. However, any future improvements to the existing water distribution infrastructure would be primarily provided on sites with land use designations that allow for urbanized land uses, and the environmental impacts of constructing and operating the new water distribution infrastructure are anticipated to be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan. Furthermore, according to the City of Tracy UWMP, the projected 2040 water supplies are adequate to meet demand that would be generated by buildout of the General Plan. In addition, most new development accommodated under the proposed Project is expected to be infill and would rely on the existing distribution network to convey available water supplies, however individual project would be required to identify if any site-specific improvements to serve future development is necessary. As described in the UWMP, implementation and buildout of the City of Tracy General Plan would not result in the need to construct or expand water supply and treatment facilities that were not already accounted for in the UWMP and Citywide Water Master Plan. While the UWMP assumed fewer units for the RHNA than the Rezone Program and General Plan Amendment, any additional water conveyance and treatment infrastructure needed in the future would be considered and approved by the City. Therefore, implementation of the proposed Project would have a ***less-than-significant*** impact on water treatment facilities.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None required.

Impact 3.6-5: The proposed Project would not have the potential to have insufficient water supplies available to serve the Project from existing entitlements and resources. (Less than Significant)

PROJECTED WATER SUPPLY FOR THE PROPOSED PROJECT

Water demands for the Buildout associated with the Housing Rezone Program and General Plan Amendment to accommodate the RHNA allocation will be served using the City's existing and future portfolio of water supplies. Table 3.6-7 shows the City's existing and planned future potable water supplies and the City's projected water demands in normal, single dry and multiple dry years.

While the population growth associated with the RHNA served by the City would exceed the UWMP's expectations for anticipated population growth during the planning period, the *Water Supply and Wastewater Capacity Evaluation* prepared for the proposed Project, and included as Appendix F, demonstrates that the City's existing and additional planned future water supplies are sufficient to meet the City's existing water demands, including those future water demands associated with the proposed Project, under all hydrologic conditions (including Normal Years, Single

Dry Years, and Multiple Dry Years), and through Buildout of the General Plan with full development of the proposed Recycled Water Exchange Program. However, during a single dry year or a multiple dry year period, the City may experience a water supply shortfall. To close the gap between supply and demand, the City will need to implement its Water Shortage Contingency Plan to reduce water demands and rely more heavily on groundwater and proposed future supply projects.

To be conservative, water demands were assumed to be at normal levels. With future planned projects implemented, the results of the *Water Supply and Wastewater Capacity Evaluation* show that water supply is sufficient during normal years. However, during a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, use of available groundwater supplies, and the proposed future water supply projects to overcome the gap between supply and demand. As described in the City's 2020 UWMP, these findings are primarily due to projected reduced reliability of the City's CVP supplies and SSJID supplies in dry years.

Water demand within the City's water service area is not expected to exceed the City's supplies at Buildout under normal hydrologic conditions if the City is able to fully implement its future planned projects, which include Aquifer Storage and Recovery Program Expansion, Recycled Water Distribution Network and Exchange Program for additional Central Valley Project water supplies, and recycled water distribution for non-potable use. The City has shown that it can achieve its water conservation goals. During the 2012-2016 statewide drought, the City exceeded its water conservation goals of 25 percent. During a single dry year or a multiple dry year period, the City must depend more heavily on water conservation efforts, groundwater, and the proposed future supply projects to overcome the gap between supply and demand. Investments in wet year water supplies will also be needed to refill storage in Semitropic and expand the City's ASR program. Delays in implementing the proposed future water supply projects could result in greater water supply shortages and the need for additional water conservation to meet demands.

The dry year shortfalls are based on water supply and demand projections with numerous uncertainties and the situation is dynamic as discussed in 2020 UWMP. The City continues to work on strategies and actions to address the projected water supply shortfall. The City's strategies and actions include the implementation of demand management measures as part of its water conservation program, consideration of net neutral policies to improve water use efficiency community-wide, and implementation of the future water supply projects.

The water demands for buildout of the proposed Project are included in the projected water demands. Therefore, the City is able to serve the proposed Project in addition to existing and planned developments with the existing and planned future water supplies including minor reliance on demand reductions or the Recycled Water Exchange Program in Single Dry Years. Depending upon the pace of other developments and timing of development of the proposed Project, construction of additional infrastructure and acquisition of future water supplies identified in the water Master Plan may be triggered. As identified above, the proposed Project would not result in insufficient water supplies available to serve the Project from existing entitlements and resources. Therefore, the proposed Project would result in a ***less than significant*** impact to water supplies.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None required.

CUMULATIVE IMPACTS

The cumulative setting includes all areas covered in the service areas of the City's water supply services.

Impact 3.6-6: The proposed Project, in combination with cumulative development, would not require construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, or have inadequate water supply. (Less than Significant)

Development facilitated by the Project would be required to conform to federal, State, and local policies that would reduce water supply impacts. When applicable, any additional new development within the Tracy Planning Area would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the General Plan, the Tracy Municipal Code, and SB 610 and SB 221, which require WSAs for large development projects prior to approval.

The City has adequate water supplies to support existing demand in the city in addition to the proposed project under all hydrologic conditions. Table 3.6-7 summarizes the projected availability of the City's existing and planned future potable water supplies compared with projected water demands in normal, single dry, and multiple dry years.

In addition, the City requires development to demonstrate adequacy of facilities and water supplies through. Therefore, development facilitated by the Project to serve regional housing needs would not be expected to result in insufficient water supplies and the proposed Project would not require the construction of new water treatment facilities or expansion of existing water treatment facilities for water service. The City currently complies with the statutory requirements listed in the regulatory section, and the City will continue to comply with the state and federal regulatory requirements.

As mentioned above, the proposed Project demonstrates that the City's existing and available potable water supplies are sufficient to meet the City's existing and projected future potable water under all hydrologic conditions. Therefore, this cumulative impact is considered ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None required.

3.6.3 STORM WATER

ENVIRONMENTAL SETTING

Existing City Facilities

The following information was provided in the City of Tracy Citywide Storm Drainage Master Plan (2022). The City of Tracy provides and maintains a system of storm drains, detention basins, and pumping facilities as well as monitoring and control of the operations of the storm drain system. Additionally, the City enforces storm drain regulations established by the US EPA and the State of California.

In general, new development projects will be required to provide site-specific or project-specific storm drainage solutions that are consistent with the overall infrastructure approach presented in the City's Storm Drain Master Plan (SDMP). The City may allow for a reasonable degree of flexibility to be incorporated into specific design approaches as a part of achieving effective solutions, including adjustments to alignments of linear storm drainage conveyance facilities and adjustments to configurations of detention facilities. Modifications and refinement to the storm drainage facilities master plan may be considered by the City during the Specific Plan and development review process for new development. However, any significant modifications to the elements of the SDMP must be approved by the City and will require that a formal "Supplement" be adopted by the City Council.

The City's Public Works Department manages Tracy's storm drainage system. Stormwater drains through open channels, storm drains, and closed conduits that are owned, operated, and maintained by the City and the West Side Irrigation District. The system includes three outfalls: the West Side Irrigation District (WSID) Main Drain; the Westside Channel Outfall System; and the Sugar Cut Outfall. These outfalls carry and discharge storm runoff into the Old River and utilize pump stations to move water over grades; however, the majority of the system is gravity operated.

Future Storm Drain Master Plan Improvements

The City of Tracy CSDMP provides recommendations to correct existing significant deficiencies, to accommodate future development and to improve planning associated with drainage issues. Specifically, the CSDMP includes the following recommendations:

- Implement capital improvements projects to correct the most significant existing deficiencies and to accommodate future development without creating new, or exacerbating existing, significant deficiencies;
- Perform additional investigations to refine capital improvement project recommendations;
- Comply with flood control and drainage requirements;
- Make Operation and Maintenance Improvements.

REGULATORY SETTING

Clean Water Act

The Clean Water Act (CWA) regulates the water quality of all discharges into waters of the United States including wetlands, perennial and intermittent stream channels. Section 401, Title 33, Section 1341 of the CWA sets forth water quality certification requirements for "any applicant applying for a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters." Section 404, Title 33, Section 1344 of the CWA in part authorizes the U.S. Army Corps of Engineers to:

- Set requirements and standards pertaining to such discharges: subparagraph (e); Issue permits "for the discharge of dredged or fill material into the navigable waters at specified disposal sites": subparagraph (a);
- Specify the disposal sites for such permits: subparagraph (b);
- Deny or restrict the use of specified disposal sites if "the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies and fishery areas": subparagraph (c);
- Specify type of and conditions for non-prohibited discharges: subparagraph (f);
- Provide for individual State or interstate compact administration of general permit programs: subparagraphs (g), (h), and (j);
- Withdraw approval of such State or interstate permit programs: subparagraph (i);
- Ensure public availability of permits and permit applications: subparagraph (o);
- Exempt certain Federal or State projects from regulation under this Section: subparagraph (r); and,
- Determine conditions and penalties for violation of permit conditions or limitations: subparagraph (s).
- Section 401 certification is required prior to final issuance of Section 404 permits from the U.S. Army Corps of Engineers.

The SWRCB and RWQCBs enforce State of California statutes that are equivalent to or more stringent than the Federal statutes. RWQCBs are responsible for establishing water quality standards and objectives that protect the beneficial uses of various waters including the San Joaquin River, and other waters in the Tracy Planning Area. In the Tracy Planning Area, the RWQCB is responsible for protecting surface and groundwater from both point and non-point sources of pollution. Water quality objectives for all of the water bodies within the Tracy Planning Area were established by the RWQCB and are listed in its Basin Plan.

National Pollutant Discharge Elimination System (NPDES)

National Pollutant Discharge Elimination System (NPDES) permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.).

The RWQCB issues these permits in lieu of direct issuance by the Environmental Protection Agency, subject to review and approval by the Environmental Protection Agency Regional Administrator. The terms of these NPDES permits implement pertinent provisions of the Federal Clean Water Act and the Act's implementing regulations, including pre-treatment, sludge management, effluent limitations for specific industries, and anti- degradation. In general, the discharge of pollutants is to be eliminated or reduced as much as practicable so as to achieve the Clean Water Act's goal of "fishable and swimmable" navigable (surface) waters. Technically, all NPDES permits issued by the RWQCB are also Waste Discharge Requirements issued under the authority of the CWA.

These NPDES permits regulate discharges from publicly owned treatment works, industrial discharges, stormwater runoff, dewatering operations, and groundwater cleanup discharges. NPDES permits are issued for five years or less, and are therefore to be updated regularly. The rapid and dramatic population and urban growth in the Central Valley Region has caused a significant increase in NPDES permit applications for new waste discharges. To expedite the permit issuance process, the SWRCB has adopted several general NPDES permits, each of which regulates numerous discharges of similar types of wastes. The SWRCB has issued general permits for stormwater runoff from industrial and construction sites statewide. Stormwater discharges from industrial and construction activities in the Central Valley Region can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB.

A Phase II Small Municipal Separate Storm Sewer (MS4) General Permit was adopted by the SWRCB on December 8, 2017 and became effective February 1, 2018. The Permit has numerous components and the City is required to implement these components in stages over the five-year period of the Permit. The Cities of Lathrop, Lodi, Manteca, Patterson, Tracy and San Joaquin County (Partners) collaborated to develop a Multi-Agency Post-Construction Standards Manual to meet the MS4 permit requirement. The SWRCB adopted Order No. 2017-0113-DWQ in 2018, which requires that agencies regulate post-construction development through a number of different program elements. In response to this order, five cities, including Tracy, and San Joaquin County collaborated together to develop a "Multi Agency Post-Construction Stormwater Standards Manual."

Federal Emergency Management Agency

San Joaquin County is a participant in the National Flood Insurance Program (NFIP), a federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management criteria. The National Flood Insurance Act of 1968 has adopted as a desired level of protection, an expectation that developments should be protected from floodwater damage of the Intermediate Regional Flood (IRF). The IRF is defined as a flood that has an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year. Communities are occasionally audited by the Department of Water Resources (DWR) to insure the proper implementation of FEMA floodplain management regulations.

Department of Water Resources

DWR's major responsibilities include preparing and updating the California Water Plan to guide development and management of the State's water resources, planning, designing, constructing, operating, and maintaining the State Water Resources Development System, protecting and

restoring the Sacramento-San Joaquin Delta, regulating dams, providing flood protection, assisting in emergency management to safeguard life and property, educating the public, and serving local water needs by providing technical assistance. In addition, the DWR cooperates with local agencies on water resources investigations; supports watershed and river restoration programs; encourages water conservation; explores conjunctive use of ground and surface water; facilitates voluntary water transfers; and, when needed, operates a State drought water bank.

California Water Code

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Division 7 of the California Water Code) (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the RWQCBs power to protect water quality, and is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its State water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

The Water Code Section 13260 requires all dischargers of waste that may affect water quality in waters of the state to prepare and provide a water quality discharge report to the RWQCB. Section 13260a-c is as follows:

> (a) Each of the following persons shall file with the appropriate regional board a report of the discharge, containing the information that may be required by the regional board:
>
> > (1) A person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state, other than into a community sewer system.
> >
> > (2) A person who is a citizen, domiciliary, or political agency or entity of this state discharging waste, or proposing to discharge waste, outside the boundaries of the state in a manner that could affect the quality of the waters of the state within any region.
> >
> > (3) A person operating, or proposing to construct, an injection well.
>
> (b) No report of waste discharge need be filed pursuant to subdivision (a) if the requirement is waived pursuant to Section 13269.

(c) Each person subject to subdivision (a) shall file with the appropriate regional board a report of waste discharge relative to any material change or proposed change in the character, location, or volume of the discharge.

Water Quality Control Plan for the Central Valley Region

The Water Quality Control Plan for the Central Valley Region (Basin Plan) includes a summary of beneficial water uses, water quality objectives needed to protect the identified beneficial uses, and implementation measures. The Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the Federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality that must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards.

The RWQCB regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. Permits are issued under a number of programs and authorities. The terms and conditions of these discharge permits are enforced through a variety of technical, administrative, and legal means. Water quality problems in the region are listed in the Basin Plan, along with the causes, where they are known. For water bodies with quality below the levels necessary to allow all the beneficial uses of the water to be met, plans for improving water quality are included. The Basin Plan reflects, incorporates, and implements applicable portions of a number of national and statewide water quality plans and policies, including the California Water Code and the Clean Water Act.

200-Year Flood Protection in Central Valley

Both State policy and recently enacted State legislation (Senate Bill 5) call for 200-year (0.5% annual chance) flood protection to be the minimum level of protection for urban and urbanizing areas in the Central Valley. Senate Bill 5 (SB5) requires that the 200-year protection be consistent with criteria used or developed by the Department of Water Resources. SB 5 requires all urban and urbanizing areas in the Sacramento and San Joaquin Valleys to achieve 200-year flood protection in order to approve development. The new law restricts approval of development after 2015 if "adequate progress" towards achieving this standard is not met. Urban and urbanizing areas protected by State-Federal project levees cannot use "adequate progress" as a condition to approve development after 2025.

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to stormwater and drainage. General Plan policies applicable to the Project are identified below:

POLICIES

- PF-6.1-P1. The City shall promote water conservation by implementing the Best Management Practices contained in the Urban Water Management Plan.

- PF-6.1-P2. The City shall continue to acquire additional sources of water supplies to meet the City's future demands.
- PF-6.1-P3. The extent feasible, the City shall use surface water supplies to meet daily water needs and reduce reliance on groundwater supplies.
- PF-6.1-P4. The City shall establish water demand reduction standards for new development and redevelopment to reduce per capita and total demand for water.
- PF-6.2-P1. The City shall maintain water storage, conveyance and treatment infrastructure in good working condition in order to supply domestic water to all users with adequate quantities, flows and pressures.
- PF-6.2-P2. Storage reservoirs should be buried or partially buried depending on local groundwater conditions to allow for joint use of the site with parks or recreational facilities, unless reservoirs are elevated to provide a gravity flow system, in which case the reservoirs shall be screened by landscaping and/or earthen berms.
- PF-6.3-P1. Structures with plumbing that are located within the City limits shall connect to the City water supply system.
- PF-6.3-P2. New developments shall dedicate land for utility infrastructure such as treatment facilities, tanks, pump stations and wells as needed to support the development of their project.
- PF-6.3-P3. The City shall be responsible for constructing new transmission water lines, as needed to meet future needs. Individual development projects shall be responsible for the construction of all water transmission means.
- PF-6.3-P4. All new water facilities shall be designed to accommodate expected capacity for buildout of areas served by these facilities but may be constructed in phases to reduce initial and overall costs.
- PF-6.3-P5. The availability of sufficient, reliable water shall be taken into account when considering the approval of new development.
- PF-6.3-P6. Costs for water service expansion shall be distributed among new water users fairly and equitably.
- PF-6.4-P1. Groundwater supplies should be reserved for emergency use during water treatment shutdowns, short-term shortages of surface water supplies or during droughts.
- PF-6.4-P2: Backup emergency power systems shall be provided at all essential water facilities that rely on electric power.
- PF-6.4-P3. Storage reservoir facilities should be located at naturally high topographic locations to capitalize on gravity flow, whenever possible.
- PF-6.4-P4. Future water systems and facilities shall be designed to minimize the likelihood of damage from vandalism or terrorist activity.
- PF-6.5-P1. The City shall maintain wastewater conveyance, treatment and disposal infrastructure in good working condition in order to supply municipal sewer service to the City's residents and businesses.
- PF-6.5-P2. The City shall expand the existing wastewater treatment plant to the extent possible or pursue a single new west side facility instead of building new facilities at multiple locations to meet future needs.

- PF-6.5-P3. New habitable structures located within the City limits shall connect to the public wastewater collection system.
- PF-7.1-P1. Areas used for the land application of treated effluent may also be used for agriculture.
- PF-7.2-P1. Wastewater collection and treatment facilities shall be designed to serve expected buildout of the areas served by these facilities but constructed in phases to reduce initial and overall costs.
- PF-7.2-P2. The City shall construct new wastewater trunk lines as needed. Individual development projects shall be responsible for construction of all collection lines other than trunk lines.
- PF-7.2-P3. The approval of new development shall be conditioned on the availability of sufficient capacity in the wastewater collection and treatment system to serve the project.
- PF-7.2-P4. "Package" treatment plants shall not be allowed in the City.
- PF-7.2-P5: New development shall fully fund the cost of new wastewater treatment and disposal facilities.
- PF-7.2-P6. Prior to any development approvals within an Urban Reserve, the City shall complete new wastewater master planning and wastewater and disposal studies, particularly for the west side of the city. These studies are to be funded by proponents of new development and must show how adequate wastewater treatment will be provided to the Urban Reserve in question.
- PF-7.3-P1. New wastewater treatment plants should be located to allow for distribution of recycled water to application areas by gravity flow where feasible.
- PF-7.3-P2. The City shall integrate public facilities and wastewater reclamation sites with agricultural and open space preservation programs where feasible.
- PF-7.3-P3. Biosolid disposal shall be managed so as to minimize impacts to the environment and public health.
- PF-7.3-P4. The City shall establish wastewater treatment demand reduction standards for new development and redevelopment to reduce per capita and total demand for wastewater treatment.
- PF-8.1-P1. Stormwater infrastructure shall be maintained in good condition.
- PF-8.1-P2. Stormwater infrastructure shall minimize local flooding by attaining capacity that conforms with the Storm Drainage Master Plan and City Design Standards.
- PF-8.1-P3. New permanent stormwater infrastructure shall be designed to serve dual purposes to the extent possible. This includes the following: - Drainage facilities integrated into recreation corridors with bike paths, sidewalks and landscaping. - Drainage channels integrated with transportation and environmental corridors. - Storm water detention basins shall incorporate active and passive recreation areas where feasible. These areas shall not count towards parks dedication requirements.
- PF-8.1-P4. When temporary retention or detention facilities are no longer needed after an outfall system is constructed, the sites shall be backfilled and disconnected from the storm drainage system.
- PF-8.1-P5. The City shall ensure a fair and equitable distribution of costs for stormwater system upgrades, expansion and maintenance.

- PF-8.1-P6. Design of storm drainage facilities shall be consistent with State and federal requirements, including NPDES requirements.
- PF-8.1-P7. Planning for stormwater facilities should consider possible future retrofitting needs associated with changing regulations pertaining to storm water quality, including NPDES requirements.
- PF-8.2-P1. To the extent feasible, new development projects shall incorporate methods of reducing storm runoff within the project to reduce the requirements for downstream storm drainage infrastructure and improve stormwater quality.
- PF-8.2-P2. New storm drainage facilities shall meet adopted City standards, including the standards and policies contained in the Storm Water Management Plan, the Storm Drainage Master Plan and the Parkways Design Manual.
- PF-8.2-P3. New development projects shall only be approved if necessary, stormwater infrastructure is planned and is in compliance with environmental regulations.
- PF-8.2-P4. If sufficient downstream stormwater infrastructure has not yet been constructed, new development projects shall be required to implement temporary on-site retention facilities in conformance with City standards.

City of Tracy Municipal Code

The following chapters of the Tracy Municipal Code relate to stormwater and drainage.

CHAPTER 9.52 FLOODPLAIN REGULATIONS

This chapter addresses floodplain regulations and requirements for new development and construction within Flood Hazard Areas delineated by Flood Insurance Rate Maps published by FEMA.

CHAPTER 11.28 WATER MANAGEMENT

This chapter addresses the prevention of waste and unreasonable water use and to promote water conservation as an effective means to manage the local water supply.

CHAPTER 11.32 STORM AND SURFACE WATER MANAGEMENT ENTERPRISE AND UTILITY

This chapter addresses the need to provide effective management of the City's storm drainage facilities.

CHAPTER 11.34 STORMWATER MANAGEMENT AND DISCHARGE CONTROL

This chapter addresses City requirements for stormwater management and discharge control, including controlling non-stormwater discharges to the stormwater conveyance system, eliminating discharges to the stormwater conveyance system from spills, dumping or disposal of materials other than stormwater, reducing pollutants in urban stormwater discharges to the maximum extent practicable.

CHAPTER 11.30 - RECYCLED AND NON-POTABLE WATER

This chapter addresses the use of recycled water within the city for non-potable uses. Specifically, this chapter requires new developments in the city to include recycled water distribution systems.

SECTION 11.34.210 DESIGN STANDARDS

According to section 11.34.210 Design Standards of the City's Municipal Code, all construction of public stormwater conveyance system infrastructure shall conform to design criteria, standard plans and specifications and the inspection and testing procedures set forth in the applicable City public improvement design standards.

Utility Master Plans

The City of Tracy maintains a variety of Master Plan documents that guide the design, development, and maintenance of the utilities within the city limits. These include: *Urban Water Management Plan* (2020), Citywide *Water System Master Plan* (2024), Citywide *Storm Drainage Master Plan* (2022) *Wastewater Master Plan* (2023), and the *Citywide Public Facilities Master Plan* (2024).

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project may have a significant impact on the environment associated with Utilities if it would:

- Require or result in the relocation or construction of new or expanded storm water drainage facilities, the construction of which could cause significant environmental effects.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-7: The proposed Project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Buildout associated with the Housing Rezone Program and General Plan Amendment to accommodate the RHNA allocation would result in increased areas of impervious surfaces throughout the city of Tracy, resulting in the need for additional or expanded stormwater drainage, conveyance, and retention infrastructure. The infrastructure and facilities necessary to serve new growth would involve development of some facilities on-site within new development projects, some facilities off-site on appropriately designated land, and may also involve improvements to existing facilities and disturbance of existing rights-of-way. Stormwater drainage and conveyance facilities would be evaluated at the project-level in association with subsequent development projects. However, the facilities would be primarily provided on sites with land use designations that allow such uses and the environmental impacts of constructing and operating the facilities would likely be similar to those associated with new development, redevelopment, and infrastructure projects under the General Plan as discussed throughout this Draft EIR.

Pursuant to section 11.34.210 Design Standards of the City's Municipal Code, installation of the storm drain systems would be required to conform to the design criteria, standard plans and specifications and the inspection and testing procedures set forth in the applicable City public improvement design standards. Thus, the proposed storm drainage collection and detention systems will be subject to the SWRCB and City of Tracy regulations, including: Tracy Municipal Code, Tracy Storm Drain Master Plan, 2022; Phase II, NPDES Permit Requirements; NPDES-MS4 Permit Requirements; and LID Guidelines.

As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the General Plan, Municipal Code, and other applicable regulations. Subsequent development and infrastructure projects would also be analyzed for potential environmental impacts, consistent with the requirements of CEQA. As such, this is a ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

CUMULATIVE IMPACTS

The cumulative setting includes all areas covered in the service areas of the City's stormwater and drainage services.

Impact 3.6-8: The proposed Project, in combination with other cumulative development, would not have the potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

Cumulative development contributes to an incremental increase in impervious surfaces that could increase stormwater runoff and impact existing storm drain facilities. All cumulative projects would be required to comply with City ordinances and General Plan policies, as well as other regulations that minimize stormwater runoff, such as the Clean Water Act. As discussed above, the Project's contribution to cumulative impacts would be less than significant. The City's General Plan contains policies and programs to reduce stormwater runoff. Likewise, the sections of the Tracy Municipal Code that protect water quality, also minimize stormwater runoff, such as Chapter 11.34 Stormwater Management and Discharge Control. All future development under the Project would also be required to comply with the Clean Water Act and regulations enforced by the SWQCB and RWQCB, which require reductions to stormwater runoff and protection of waterways from impacts of development. Therefore, as discussed, development consistent with the proposed Project would have a ***less than significant*** contribution to cumulative impacts.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None required.

3.6.4 SOLID WASTE

ENVIRONMENTAL SETTING

The City of Tracy contracts with Tracy Disposal Service, a private company, for solid waste collection and disposal. Solid waste is taken to the Tracy Material Recovery Facility (MRF) and Transfer Station on South MacArthur Drive before being sent to the Foothill Sanitary Landfill on Shelton Road. The MRF, which is operated by Tracy Material Recovery and Solid Waste Transfer, Inc., has a daily intake capacity of 1,800 tons and on average takes in 580 tons per day from Tracy. The transfer station site is approximately 80 acres.

Presently, the permitted capacity of the Foothill Landfill is 102 million cubic yards. The remaining capacity of the facility is approximately 95 million cubic yards. Current permits indicate a closure in 2054. There are no plans to expand the Foothill Landfill or build a new one to accommodate Tracy's waste since the Foothill Landfill is expected to meet the City's needs for the foreseeable future.

According to the California Department of Resources Recycling and Recovery (CalRecycle), in 2024, Tracy disposed of approximately 131,509 tons of solid waste. CalRecycle provides an average per-capita solid waste disposal rate for residents and business. In Tracy, CalRecycle identified solid waste disposal rates of 7.4 tons per resident per year and 18.6 tons per employee per year in 2024.[12]

The City of Tracy, in coordination with Tracy Disposal Service, also provides recycling services to city residents and businesses. The City provides curbside residential collection of recyclable materials. Acceptable materials include glass containers, all plastics, tin and aluminum cans, plastic milk cartons, newsprint, boxboard, corrugated cardboard, bond paper and magazines. Residents may also recycle some materials at buy-back centers. Special recycling programs include an electronics waste program; a tire recycling program, which collects about 60 tons of tires per year; and a twice-per-year residential cleanup program on large items and debris. There are also opportunities to recycle construction and demolition waste.

The California Integrated Waste Management Act (CIWMA) of 1989, also commonly known as Assembly Bill (AB) 939, requires local agencies to implement source reduction, recycling, and composting (see discussion under "Regulatory Setting" below). To comply with the CIWMA, the City adopted Ordinance Article IV Chapter 74, the Business and Multi-family, commercial and industrial recycling programs in May 2003. The program requires businesses and multifamily residential properties to keep recyclable materials separate from all other solid waste, to provide signs and labeled containers for the storage and collection of recyclable materials, and to either self-haul or enter into a written service agreement with a franchise hauler (Tracy Disposal Service) for the collection and subsequent delivery of recyclable materials to an authorized recycling facility. Businesses and multifamily residential property owners and operators must prepare a recycling plan

[12] CalRecycle, 2024. Jurisdiction Per Capita Disposal Trends, Jurisdiction: Tracy. Available: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed: December 1, 2025.

that provides information on the types of on-site recyclable materials and verifies that labeled containers, signs, and a disposal service are available to ensure compliance with the ordinance.

REGULATORY SETTING

California's Integrated Waste Management Act of 1989 (AB 939)

California's Integrated Waste Management Act of 1989 (AB 939) set a requirement for cities and counties to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling and composting. In order to achieve this goal, AB 939 requires that each City and County prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 939 also established requirements for cities and counties to develop and implement plans for the safe management of household hazardous wastes. In order to achieve this goal, AB 939 requires that each city and county prepare and submit a Household Hazardous Waste Element.

75 Percent Solid Waste Diversion

AB 341 requires CalRecycle to issue a report to the Legislature that includes strategies and recommendations that would enable the state to recycle 75 percent of the solid waste generated in the state by January 1, 2020, requires businesses that meet specified thresholds in the bill to arrange for recycling services by July 1, 2012, and also streamlines various regulatory processes.

Construction and Demolition Waste Materials Diversion

Senate Bill 1374 (SB 1374), Construction and Demolition Waste Materials Diversion Requirements, requires that jurisdictions summarize their progress realized in diverting construction and demolition waste from the waste stream in their annual AB 939 reports. SB 1374 required the California Integrated Waste Management Board (CIWMB, which is now CalRecycle) to adopt a model construction and demolition ordinance for voluntary implementation by local jurisdictions.

California Green Building Standards Code (CALGreen)

CALGreen requires the diversion of at least 50 percent of the construction waste generated during most new construction projects (CALGreen Sections 4.408 and 5.408) and some additions and alterations to nonresidential building projects (CALGreen Section 5.713).

California Organic Waste Regulations (SB 1383)

SB 1383 was adopted to reduce organics waste landfill disposal by 75% (from 2014 levels) by 2025. This means diverting more than 20 million tons from landfills. The legislation aims to slow climate change by diverting organic materials from landfills, recovering 20% of edible food and redirecting it to food-insecure Californians.

Beginning January 1, 2022, residences and businesses are required to sort and separately collect food scraps, yard debris and food-soiled paper from trash and recycling and subscribe to an organic waste collection service.

City of Tracy General Plan

The City of Tracy General Plan includes several policies that are relevant to solid waste. General Plan policies applicable to the Project are identified below:

POLICIES: PUBLIC FACILITIES ELEMENT

- PF-5.1-P1. Promote redesign, reuse, composting and shared producer responsibility of discarded materials.
- PF-5.1-P2. The City shall strive to meet or exceed the State's goal of diverting 50 percent of all solid waste from landfills.
- PF-5.1-P3. The City shall encourage local businesses to expand their recycling efforts and to reduce packaging of products manufactured in the city.
- PF-5.1-P4. Public buildings shall be designed or improved with onsite storage facilities for recycled materials.
- PF-5.1-P5. Salvage and reuse of construction and demolition materials and debris is encouraged at all construction projects in the city.
- PF-5.1-P6. City buildings shall be rehabilitated and reused when feasible.
- PF-5.1-P7. The City shall encourage the use of post-consumer recycled paper and other recycled materials in all City operations.
- PF-5.1-P8. Residential, industrial, commercial and retail buildings should be designed or improved to accommodate an increase in the amount and type of recycled materials.

City of Tracy Municipal Code, Chapter 5.20

Chapter 5.20 of the Municipal Code regulates the collection, transportation, and disposal of refuse and solid waste of all kinds, and the collection, transfer and recovery of recyclable and organic waste material in order to promote community welfare, convenience, health, and safety.

THRESHOLDS OF SIGNIFICANCE

Consistent with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact on the environment associated with Utilities if it would:

- 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; and/or
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

Impact 3.6-9: The landfills that would serve the proposed Project have sufficient permitted capacity to accommodate the Project's solid waste disposal needs, and the proposed Project would comply with federal, State, and local statutes and regulations related to solid waste. (Less than Significant)

The City of Tracy contracts with Tracy Disposal Service, a private company, for solid waste collection and disposal. Based on the waste generation factors provided by CalRecycle, the proposed Project is expected to generate approximately 80,517 pounds per day of solid waste upon full buildout, which is equivalent to 40.3 tons per day; refer to Table 3.6-8.

TABLE 3.6-8: ESTIMATED SOLID WASTE GENERATION

LAND USE	*GENERATION FACTOR[1]*	*PROJECT*	*ESTIMATED SOLID WASTE (LBS/DAY)*
Residential	12.23 lb/household/day	6,588 units	80,571

[1] CalRecycle, 2006. Estimated Solid Waste Generation Rates, Residential Sector Generation Rates. Available: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates#Residential. Accessed: December 1, 2025.

Currently, the permitted capacity of the Foothill Landfill is 138 million cubic yards. The remaining capacity of the facility is approximately 125 million cubic yards. Current permits indicate a closure in 2082. There are no plans to expand the Foothill Landfill or build a new one to accommodate Tracy's waste since the Foothill Landfill is expected to meet the City's needs for the foreseeable future. The addition of the volume of solid waste associated with the proposed Project to the Foothill Landfill would not exceed the landfill's remaining capacity.

The proposed Project would be required to comply with applicable State and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. The City would coordinate development of the proposed Project with Tracy Disposal Service. Furthermore, the additional solid waste of 40.3 tons per day from the additional development to accommodate the Housing Rezone Program and General Plan Amendment would not exceed the existing daily capacity of the Foothill Landfill. Therefore, the proposed Project would not generate solid waste in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or exceed any State or local standards associated with solid waste. This is a ***less than significant*** impact.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None Required

CUMULATIVE IMPACTS

The cumulative setting includes all areas covered in the service areas of the City's solid waste collection and disposal services.

Impact 3.6-10: The landfills that would serve the proposed Project, in combination with other cumulative development, have sufficient permitted capacity to accommodate the Project's and cumulative developments' solid waste disposal needs, and will comply with federal, State, and local statutes and regulations related to solid waste. (Less than Significant)

Cumulative development within Tracy and other jurisdictions serve by local solid waste facilities would contribute to an incremental increase in solid waste delivered to the Foothill Landfill and other landfills in the region. Other future projects within the cumulative geographic context, would be required to comply with federal, State, and local laws and policies to address potential impacts related to solid waste.

While development and growth in the city would result in an increased generation of solid waste, the Foothill Landfill and other regional landfills have enough capacity to serve the city. Currently, the permitted capacity of the Foothill Landfill is 138 million cubic yards. The remaining capacity of the facility is approximately 125 million cubic yards. Current permits indicate a closure in 2082. As a result, the landfill could accommodate future development, and the cumulative impact would be ***less than significant***.

SIGNIFICANCE BEFORE MITIGATION

Less Than Significant

MITIGATION MEASURE(S)

None required.

Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this environmental impact report (EIR) must describe a range of reasonable alternatives to the proposed Project that might feasibly accomplish most of the basic objectives of the proposed Project and avoid or substantially lessen one or more of the significant effects of the project. The feasibility of an alternative is determined by the lead agency based on a variety of factors including but not limited to site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines Section 15126.6(f)(1)).

The chapter discloses the comparative effects of each of the alternatives relative to Tracy Housing Rezone Program and General Plan Amendment project, and evaluates the relationship of the alternatives to the objectives of the Project. As required under Section 15126.6(e) of the CEQA Guidelines, an environmentally superior alternative for the proposed Project is identified at the end of this chapter.

4.1 FACTORS IN THE SELECTION OF ALTERNATIVES

PROJECT OBJECTIVES

CEQA Guidelines Section 15124(b) requires that an EIR include a statement of the objectives from an applicant intended to be achieved by the project. The objectives describe the purpose of the Project and are intended to assist the lead agency in developing a reasonable range of alternatives for consideration in the EIR, and to assist the decision makers in assessing the feasibility of mitigation measures and alternatives. The objectives of proposed project are as follows:

- Meet the requirements of State Housing Law by implementing zoning and land use changes, as called for in the City's 6th Cycle Housing Element.
- Update the City of Tracy General Plan Safety Element to address State requirements related to hazards, including flooding, fire, and emergency preparedness.
- Amend the Tracy General Plan to include a new Environmental Justice Element, consistent with the requirements of SB 1000.

PROJECT CHARACTERISTICS

The proposed Project includes a rezone program, municipal code amendments, and targeted General Plan updates (as described in detail in Chapter 2.0) that could increase the development capacity on some parcels within the city. All areas included within the rezone programs have previously been identified for urban site uses, and as such the development footprint impacts would generally be considered substantially similar throughout the Planning Area, and would be consistent previous environmental reviews. This EIR focuses on impacts that could increase due to the rezoning program, and municipal codes and General Plan updates to meet State housing goals would generally include impacts related to capacity increases from additional population and housing units. (i.e., increased vehicle trips, GHG emissions, noise, water use, etc.). As such the analysis in this EIR focuses on the following impacts areas included within this EIR: Air Quality,

Greenhouse Gases, Noise, Transportation, Utilities and Service Systems, and Tribal Cultural Resources.

SIGNIFICANT EFFECTS OF THE PROPOSED PROJECT

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed Project on various aspects of the environment are discussed in detail in Chapter 3, Environmental Impacts, Setting, and Mitigation Measures. The project-specific and cumulative impacts that cannot be avoided if the proposed Project is approved as proposed are listed below.

> **Impact 3.4-2:** Implementation of the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT). (Significant and Unavoidable)

4.2 ALTERNATIVES CONSIDERED IN THIS EIR

This section describes the range of alternatives to the proposed Project that are analyzed in this Draft EIR and examines how specific environmental impacts would differ in severity compared to those associated with the proposed Project. It should be noted that this is a program level document and all site specific impact are not know at this time.

CEQA requires consideration of a "no project" alternative, which addresses the impacts of not moving forward with the proposed Project. The No Project Alternative can take many forms, including doing nothing, depending on what may likely occur if a project is not developed.

Two alternatives to the Housing Rezone Program and General Plan Amendment were considered based on the analysis performed to identify the environmental effects of the proposed Project. The following alternatives are considered in this section:

- Alternative 1 – No Project/Existing General Plan
- Alternative 2 – Reduced Density

Table 4-1 presents an overview of the proposed alternatives, which are analyzed below.

Growth projections should not be considered a precise prediction for growth, as the actual amount of development that will occur throughout the planning horizon of the General Plan is based on many factors outside of the City's control. Actual future development would depend on future real estate and labor market conditions, property owner preferences and decisions, site-specific constraints, and other factors.

TABLE 4-1: COMPARISON OF PROJECT ALTERNATIVES

ALTERNATIVE	*POPULATION*	*HOUSING UNITS*	*JOBS*	*JOBS HOUSING BALANCE*
2024 Baseline (Existing Conditions)				
Planning Area	96,076	29,653	39,921	1.35
Projected 2045 Total Buildout*				
Proposed Project	149,298	51,008	90,916	1.78
Alternative 1 – No Project/Existing General Plan	128,873	44,704	95,760	2.14
Alternative 2 – Reduced Density	140,072	47,856	90,916	1.90
Total New Growth Over Existing Conditions 2024-2045				
Proposed Project	53,223	21,355	50,995	2.39
Alternative 1 – No Project/Existing General Plan	32,797	15,051	55,839	3.71
Alternative 2 – Sites Rezone with Reduced Density	43,996	18,203	50,995	2.80

NOTE:

**TOTAL BUILDOUT INCLUDES DEVELOPMENT ON VACANT AND UNDERUTILIZED PARCELS WITHIN TRACY THAT ARE NOT OTHERWISE IMPACTED OR RELATED TO THE PROPOSED REZONE PROGRAM IN ADDITION TO THE DEVELOPMENT ACCOMMODATED UNDER THE PROPOSED REZONE PROGRAM.*

SOURCES: DE NOVO PLANNING GROUP, 2024, 2023 SAN JOAQUIN COUNTY ASSESSOR DATA FILE, TRACY HOUSING ELEMENT INVENTORY SHAPEFILES, TRACY TRAVEL DEMAND MODEL (KIMLEY-HORN).

ALTERNATIVE 1 – NO PROJECT (NO BUILD)

CEQA Guidelines Section 15126.6(e) requires an EIR to evaluate a "no project" alternative, which is defined as what would be reasonably expected to occur in the foreseeable future if the project were not approved.

Under Alternative 1, the City would continue to implement the existing General Plan including the City's existing General Plan Land Use Map (as shown on Figure 4-1), and no changes would be made to address updated General Plan Guidelines, or the requirements of State law.

Since adoption of the existing General Plan, State legislation has been passed requiring the City to address new safety and circulation requirements in the General Plan and to further address greenhouse gas emissions, as well as required housing element updates to address regional housing needs.

Alternative 1 would result in the continuation of existing conditions and development levels. Table 4-2 shows the existing land use patterns associated with the existing General Plan within the City Limits and SOI.

TABLE 4-2: EXISTING GENERAL PLAN LAND USES

LAND USE DESIGNATION	CITY	SOI	TOTAL
	ACRES	ACRES	ACRES
Aggregate	9.69	159.84	169.53
Agriculture	--	676.25	676.25
Commercial	921.55	458.91	1,380.46
Downtown	114.62	--	114.62
Industrial	3,780.86	1,738.17	5,519.03
Office	590.76	--	590.76
Open Space	82.70	3,385.46	3,468.17
Park	644.03	199.05	843.08
Public Facilities	946.78	67.61	1,014.39
Residential High	254.80	31.45	286.24
Residential Low	4,501.97	161.77	4,663.74
Residential Medium	1,316.14	28.75	1,344.89
Residential Very Low	110.15	263.70	373.86
Traditional Residential - Ellis	191.68	--	191.68
Urban Reserve	112.13	1,961.81	2,073.94
Village Center	72.78	--	72.78
ROW	464.11	59.86	523.97
Grand Total	**14,114.76**	**9,192.62**	**23,307.38**

SOURCE: CITY OF TRACY GENERAL PLAN; SAN JOAQUIN COUNTY GIS. DENOVO PLANNING GROUP. MAP DATE: SEPTEMBER 11, 2024.

New growth would be allowed as envisioned under the existing General Plan, with land uses required to be consistent with the existing General Plan Land Use Map. Table 4-1 shows the growth associated with this alternative. As shown in Table 4-1 Alternative 1 would result in fewer hosing opportunities and increased jobs within the city when compared to the proposed Project and Alternative 2.

Comparative Analysis of Environmental Effects

The No Project Alternative would result in no changes to land uses identified on the Existing General Plan Land Use map, or changes to densities allowed within residential land uses as described in the Project Description (Chapter 2.0). All sites identified by the housing element update would remain under their existing General Land Use and Zoning designations. The No Project Alternative would not result in Housing or population increase that have not already been accounted for in the Existing General Plan. Because the No Project Alternative at buildout would add fewer additional housing units and population through 2045 when compared to the proposed Project, however the No Project Alternative would result in increased jobs within the Planning Area as no job generating land uses would be converted to residential uses as proposed by the Project and described in Chapter 2.0..

IMPACTS IDENTIFIED AS BEING THE SAME AS OR SIMILAR TO THOSE OF THE PROPOSED PROJECT

Tribal Cultural Resources: As shown in Table 4-1, Under the No Project Alternative, there will be fewer residential units but additional nonresidential square feet of development. Construction and development activities, would be substantially similar and development footprints would also remain roughly the same under all alternatives. All areas included within the rezone programs have previously been identified for urban site uses, and as such the development footprint impacts (including impacts to cultural resources) would generally be considered substantially similar throughout the Planning Area under all alternatives.

Air Quality: Under the No Project (No Build) Alternative, there will be less overall development of residential units but additional nonresidential square feet of development. Construction and development activities, would be substantially similar and development footprints would also remain roughly the same under all alternatives. This would result resulting in minimal changes to air quality compared to the Proposed Project. The proposed Project involves construction, and an overall increased vehicular traffic, and operational activities, and associated VMT, however the proposed Project would also reduce ongoing operational air quality impacts associated with industrial and commercial sites uses as the proposed Project would result in less overall non-residential square footage (industrial and commercial uses) and job reductions when compared to Alternative 1 (as shown in Table 4-1). Impacts associated with Alternative 1 would generally be considered substantially similar to the proposed Project.

Noise: Noise levels would also be similar to the proposed Project as a variety of uses would be developed throughout the city with noise levels at buildout being roughly similar during 2045 buildout under the No Project and proposed Project scenario as described in Chapter 3.3 (Noise Impact 3.3-1). Any noise differences between the proposed Project and Alternative 1 would be small, location specific, and would be and spread across the planning area, and no difference in aggregate noise levels of significance would be detected.

IMPACTS IDENTIFIED AS BEING LESS SEVERE THAN THOSE OF THE PROPOSED PROJECT

Utilities/Service Systems: Impacts to utilities were found to be less than significant under the proposed Project, and the impact level of significance would remain the same under all alternatives. Under the No Project Alternative, the city would remain consistent with existing growth levels allowed by the existing General Plan as identified in Table 4-1. Under this alternative future growth would result in fewer housing units and population and increased jobs when compared to the proposed Project. The increased in residential units would result in increased needs and use of city wide utility systems and may require system improvements and updates to master plans and capitol improvement plans to accommodate additional growth.

Due to the increased overall development levels with the residential land uses designations increases in dwelling units and population growth under the proposed Project the No Project Alternative would be anticipated to have a slightly reduced impact when compared to the proposed Project.

IMPACTS IDENTIFIED AS BEING MORE SEVERE THAN THOSE OF THE PROPOSED PROJECT

Transportation: As described in Section 3.4, Transportation, the 2045 No Project/No Build scenario resulted in a VMT per capita of 17.5 and a VMT per employee of 13.0. The 2045 proposed Project Buildout scenario resulted in a VMT per capita of 15.3 and VMT per employee of 13.4. Notably, only the 2045 No Build scenario for residential land use exceeds the VMT thresholds. It should be noted that the VMT per capita value is reduced by 2.2 VMT per capita between the 2045 No Build and the 2045 Buildout scenarios for residential uses. However, the VMT per employee value is increased by 0.4 VMT per employee between the 2045 No Build and 2045 Buildout scenarios for employment uses. As such the Project yields lower VMT per capita and a higher VMT per employee for the Build scenario compared to the No Build scenario. The proposed Project anticipates the development of a multitude of sites throughout the city. Due to the general nature of the Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that would reduce VMT for specific projects as part of this analysis. However, it should be noted that these impacts were found to be Significant under the proposed Project and the impact level of significance would remain the same under all alternatives. The proposed Project with higher density allowances may also be beneficial to overall GHG reductions as projects develop throughout the city overtime due to increased mixed use and infill opportunities that promote internalizations and internal trip capture resulting in a reduction of trips from and to a development resulting from the proximity of complementary land uses. As such impacts under the No Project Alternative would be slightly increased as development density ranges, increase areas of for mixed uses, and rezones to accommodate increase density sites and mixed use site would not be included.

Greenhouse Gases: Under the No Project (No Build) Alternative, the Planning Area would remain consistent with existing growth levels allowed by the existing General Plan as identified in Table 4-1. Under this alternative future growth would result in fewer housing opportunities and increased jobs when compared to the proposed Project. The increased in residential units as described in Section 3.4, Transportation, would result in decreased overall VMT. The Project anticipates the development of a multitude of sites throughout the city. Due to the general nature of the Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that would reduce GHGs for specific projects as part of this analysis. However, it should be noted that these impacts were also found to be less than significant under the proposed Project and the impact level of significance would remain the same under all alternatives. Additionally, the proposed Project includes higher density allowances increased mixed use and infill opportunities, that would overtime be anticipated to result in trip internalizations and Internal trip capture resulting in a reduction of trips from and to a development resulting from the proximity of complementary land uses which in turn would also benefit GHG reductions goals. Additionality the proposed Project would result in lower per capita VMT, and as such would be anticipated to result in lower GHG emissions per capita when compared to Alternative 1. As such this impact would be anticipated to be slightly increased under Alternative 1 when compared to the proposed Project.

Relationship to Significant and Unavoidable Impacts

The No Project Alternative would introduce fewer residential developments and result in fewer additional vehicle travel on the area roadways, however as described previously would result in increased residential VMT. The No Project Alternative would have an increased impact on VMT when compared to the proposed Project Therefore, implementation of the No Project Alternative would not reduce impacts to the significant and unavoidable VMT impacts associated with the proposed Project.

Relationship to Project Objectives

Development under the No Project Alternative would not achieve the Project objectives as the alternative would not implement a project consistent with the City's Housing Element efforts meet the city's regional housing needs. Development under the existing General Plan and Zoning Code would not develop enough housing units and desired density ranges to accommodate the RHNA-required at the income levels mandated by State law. Not only would the No Project Alternative fail to accommodate the housing unit needs, it would not create an excess buffer in capacity of housing units to allow for flexibility in development throughout the city.

ALTERNATIVE 2 – SITES REZONE WITH REDUCED DENSITY

This alternative (Alternative 2) considers the same rezone sites as the proposed Project (as described in Chapter 2.0); however, the densities associated with the development sites and zoning designations would remain the same as the existing land use and zoning code standards for density ranges. This Alternative would rezone the same sites, but would not include the updates to the zoning code to accommodate HE Program 9. As described in the Project Description (Chapter 2.0) HE Program 9: Provision of Adequate Sites proposed the following zones for increased densities:

- Medium Density Residential (MDR) – from 5.9-12 du/ac to 5.9-20 du/ac
- Medium Density Cluster (MDC) – from 5.9-12 du/ac to 5.9-20 du/ac
- High Density Residential (HDR) – from 12-25 du/ac to 20-35 du/ac
- General Highway Commercial (GHC) – from 12-25 du/ac to 20-35 du/ac
- Establish a new Zoning District (MU-1) at 20-35 du/acre

As shown in Table 4-1, development allowed under Alternative 2 would result in fewer residential units when compared to the proposed Project as a result of decreased in density ranges to accommodate HE Program 9. The employment uses and total jobs would remain the same as the proposed Project.

Comparative Analysis of Environmental Effects

IMPACTS IDENTIFIED AS BEING THE SAME AS OR SIMILAR TO THOSE OF THE PROPOSED PROJECT

Because both Alternative 2 and the proposed Project would develop the same total area, impacts determined by the development footprint of future projects would be substantially the same as under all alternatives.

IMPACTS IDENTIFIED AS BEING THE SAME AS OR SIMILAR TO THOSE OF THE PROPOSED PROJECT

Tribal Cultural Resources: As shown in Table 4-1, Under Alternative 2, there will be fewer residential units, and the same overall jobs at 2045 buildout. Construction and development activities, would be substantially similar and development footprints would also remain roughly the same under all alternatives. All areas included within the rezone programs have previously been identified for urban site uses, and as such the development footprint impacts (including impacts to cultural resources) would generally be considered substantially similar throughout the Planning Area under all alternatives.

Noise: Noise levels Under Alternative 2 would be similar to the proposed Project as a variety of uses would be developed throughout the city with noise levels at buildout being roughly similar during 2045 buildout under the no Project and proposed Project scenario as described above and discusses in detail in Section 3.3, Noise, of this DEIR (Impact 3.3-1). Any noise differences between the proposed Project and Alternative 2 would be minimal, location specific, and would be and spread across the planning area, and no difference in aggregate noise levels of significance would be anticipated.

IMPACTS IDENTIFIED AS BEING LESS SEVERE THAN THOSE OF THE PROPOSED PROJECT

Utilities/Service Systems: Impacts to utilities were found to be less than significant under the proposed Project, and the impact level of significance would remain the same under all alternatives. As identified in Table 4-1, under Alternative 2, the city would increase residential growth levels when compared to those allowed by the existing General Plan due to rezone sites, but less overall growth than allowed by the proposed Project. The decrease in residential units (as compared to the proposed Project) would result in a decreased needs and use of city-wide utility systems and may require fewer system improvements and updates to master plans and capital improvement plans to accommodate additional growth. Due to the increased overall development levels with the residential land uses designations increases in dwelling units and population growth under the proposed Project Alternative 2 would be anticipated to have a slightly reduced impact when compared to the proposed Project.

Air Quality: Under Alternative 2, there will be fewer development of residential units and the same overall jobs at 2045 buildout. Construction emissions and development activities, would be substantially similar and development footprints would also remain roughly the same under all alternatives. This would result resulting in minimal changes to air quality compared to the proposed Project. The proposed Project involves construction, and a slight overall reduction in vehicular traffic, and associated VMT. The proposed Project and Alternative 2 would also result in similar ongoing operational air quality impacts associated with industrial and commercial sites uses as the proposed Project and Alternative 2 would result in the same overall non-residential

square footage (industrial and commercial uses) and job totals (as shown in Table 4-1). However, due to the reduction in overall residential units it is anticipated that these reductions would carry over to reduce overall trips and may result in less overall congestions, thus slightly reducing impacts to air quality during operation at buildout. As such impacts to local air quality under Alternative 2 would be slightly reduced when compared to the proposed Project.

IMPACTS IDENTIFIED AS BEING MORE SEVERE THAN THOSE OF THE PROPOSED PROJECT

Transportation: As described in Section 3.4, Transportation, the 2045 proposed Project Buildout scenario resulted in a VMT per capita of 15.3 and VMT per employee of 13.4. Notably, both 2045 scenarios—whether No Build or Buildout—do not exceed the VMT thresholds for residential and employment-based land uses. It should be noted that the VMT per capita value is reduced by 2.2 VMT per capita between the 2045 No Build and the 2045 Buildout scenarios for residential uses. As such the additional residential development are growth particular at higher density ranges is shown to lower residential VMT per capita. The proposed Project anticipates the development of a multitude of sites throughout the city. Due to the general nature of the Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that would reduce VMT for specific projects as part of this analysis. However it should be noted that VMT impacts were found significant under the Proposed Projects and the impact level of significance would remain the same under all alternatives. The proposed Project with higher density allowances may also be beneficial to VMT reductions as projects develop throughout the city overtime due to increased mixed use and infill opportunities that promote internalizations and internal trip capture resulting in a reduction of trips from and to a development resulting from the proximity of complementary land uses. As such impacts under Alternative 2 would be slightly increased as development density ranges, increase areas of for mixed uses (consistent with HE Program 9) to accommodate increase residential development would not be included.

Greenhouse Gases: Under Alternative 2, the Project Area would remain consistent with land uses allowed by the Proposed Project (Proposed General Plan). However, as identified in Table 4-1 under this alternative future growth would result in fewer housing opportunities when compared to the proposed Project as HE Program 9 would not be implemented as density ranges through MDR, MDC, HDR, GHC, and MU land use wouldn't be updated to accommodate additional housing needs.

The increased in residential units as described in Section 3.4, Transportation, would result in decreased overall VMT, with less VMT per capita but a small increase in VMT per employee. The Project anticipates the development of a multitude of sites throughout the city. Due to the general nature of the Project, and the absence of specific development proposals, it is not possible to fully account for the effect of specific design principles, policies, and improvements that would reduce GHGs for specific projects as part of this analysis. However it should be noted that these impacts were also found to be less than significant under the Proposed Project and the impact level of significance would remain the same under all alternatives. Additionally, the proposed Project includes higher density allowances increased mixed use and infill opportunities, that would overtime result in trip internalizations and Internal trip capture resulting in a reduction of trips

from and to a development resulting from the proximity of complementary land uses which in turn would also benefit GHG reductions goals. The proposed Project would likely result in lower per capita VMT, and as such would be anticipated to result in lower GHG emissions per capita when compared to Alternative 2. As such this impact would be anticipated to be slightly increased under Alternative 2 when compared to the proposed Project.

Relationship to Significant and Unavoidable Impacts

The Alternative 2 would introduce fewer residential developments and result in less additional vehicle travel on the area roadways; however, as described above this alternative may result in increased residential VMT. As such, Alternative 2 would have an increased impact on VMT when compared to the proposed Project Therefore, implementation of Project Alternative 2 would not reduce impacts to the significant and unavoidable VMT impacts associated with the proposed Project.

Relationship to Project Objectives

Development under Project Alternative 2 would not achieve the Project objectives as the alternative would not implement a project consistent with the City's Housing Element efforts meet the City's regional housing needs. Specifically this Alternative would not implement HE Program 9 that would increase Density ranges for sites throughout the city. As such, Development under Alternative 2 would not develop enough housing units desired density ranges to accommodate the RHNA-required at the income levels mandated by State law and identified by the Housing Element.

4.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126(e)(2) requires an EIR to identify an environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

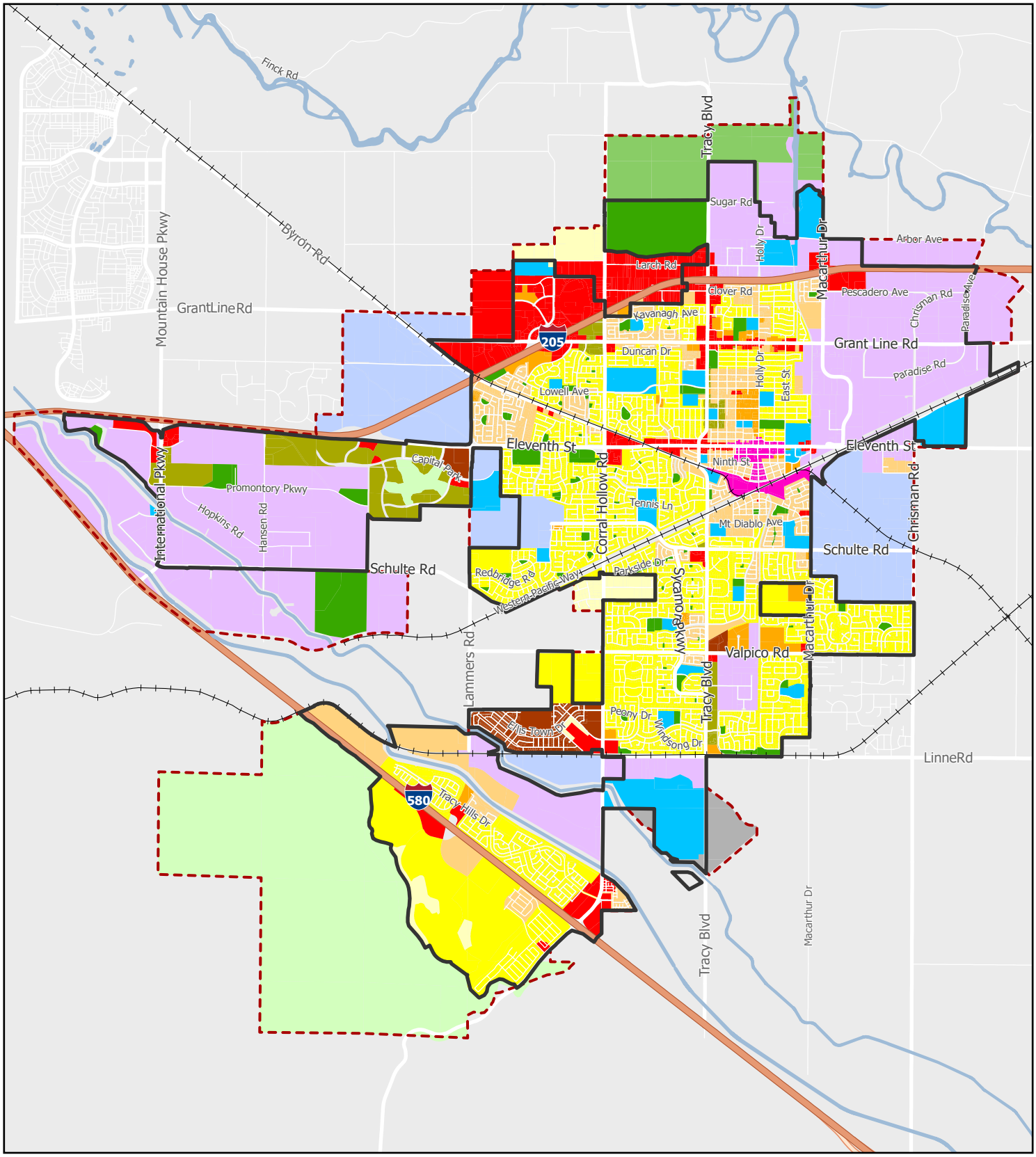
The environmentally superior alternative is that alternative with the least adverse environmental impacts. A comparative analysis of the proposed General Plan and each of the Project alternatives is provided in Table 4-3 below. The table includes a qualitative and numerical scoring system, which assigns a score of 1 to 5 to each of the alternatives with respect to how each alternative compares to the proposed project in terms of the severity of the environmental topics addressed in this EIR. A score of "3" indicates that the alternative would have the same level of impact when compared to the proposed project. A score of "1" indicates that the alternative would have a better (or reduced) impact when compared to the proposed project. A Score of "2" indicates that the alternative would have a slightly better (or slightly reduced) impact when compared to the proposed project. A score of "4" indicates that the alternative would have a slightly worse (or slightly increased) impact when compared to the proposed project. A score of "5" indicates that the alternative would have a worse (or increased) impact when compared to the proposed project. The project alternative with the lowest total score is considered the environmentally superior alternative.

As shown in Table 4-3, the Proposed Project and Alternative 2 have a score of 18. It should be noted that all of the alternatives would fail to reduce any significant and unavoidable impacts to a less than significant level. However, overall, the proposed Project would be the environmentally superior alternative because it would have the least severe impacts as compared to the other alternatives as the Project alternatives have a slightly worse VMT impact. When measured in terms of oval impacts these impacts would be substantially similar under all alternatives however the proposed Project's rezoning program combined with increased density ranges and additional opportunities for mixed used development would be viewed as opportunities to reduce VMT and GHG throughout the city on a per capita basis. As such, even though VMT impacts were found to be Significant the proposed Project would remain environmentally superior as the proposed Project provides additional opportunities to reduce per capita VMT throughout the Planning Area through compact development, increased density ranges, providing a mix of uses, resulting in trip reductions and internalizations throughout the Planning Area when compared to all other alternatives.

TABLE 4-3: COMPARISON OF ALTERNATIVES

ENVIRONMENTAL TOPIC AREA	*PROPOSED PROJECT SIGNIFICANCE LEVEL*	*ALTERNATIVE 1 NO PROJECT (NO BUILD)*	*ALTERNATIVE 2 SITES REZONE WITH REDUCED DENSITY*
Air Quality	LTS	Similar 3	Slightly Less 2
Cultural and Tribal Cultural Resources	LTS	Similar 3	Similar 3
Greenhouse Gas Emissions	LTS	Slightly More 4	Slightly More 4
Noise	LTS	Similar 3	Similar 3
Transportation	SU	Slightly More 4	Slightly More 4
Utilities and Service Systems	LTS	Slightly Less 2	Slightly Less 2
Total # System Score	18	19	18

Notes:
NI = No Impact
LTS = Less than Significant
LTSWM = Less than Significant with Mitigation
SU = Significant and Unavoidable
Source: De Novo Planning Group, 2025.



Legend

- Tracy City Limits
- Tracy Sphere of Influence
- Residential Very Low
- Residential Low
- Residential Medium
- Residential High
- Traditional Residential - Ellis
- Commercial
- Office
- Industrial
- Downtown
- Village Center
- Public Facilities
- Park
- Open Space
- Agriculture
- Aggregate
- Urban Reserve

Figure 4-1.

No Project - Existing General Plan

0 ½ 1 Miles

Sources: City of Tracy General Plan; San Joaquin County GIS. Map date: September 11, 2024.

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) to evaluate a project's effects in relationship to broader changes occurring, or that are foreseeable to occur, in the surrounding environment. Accordingly, this chapter presents a discussion of CEQA-mandated analysis for significant irreversible effects and significant and unavoidable impacts associated with the proposed Project.

5.1 INTRODUCTION

CEQA Guidelines Section 15126 requires that all phases of a project—planning, acquisition, development, and operation—be considered when evaluating the project's impact on the environment. Further, CEQA Guidelines Section 15126.2(a) requires that the evaluation of significant impacts consider direct and reasonably foreseeable indirect effects of the proposed project over the short term and long term. Section 15126 of the CEQA Guidelines also requires an EIR to identify all of the following:

- Significant environmental effects of the proposed project.
- Potentially feasible mitigation measures proposed to avoid or substantially lessen significant effects.
- Significant environmental effects that cannot be avoided if the proposed project is implemented.
- Significant irreversible environmental changes that would result from implementation of the proposed project.
- Growth-inducing impacts of the proposed project.
- Alternatives to the proposed project.[1]

The Executive Summary and Chapter 3, Environmental Impact Analysis, of this Draft EIR provide a comprehensive presentation of the proposed Project's environmental effects, potentially feasible mitigation measures, and conclusions regarding the level of significance of each impact both before and after mitigation. Chapter 4, Project Alternatives, presents a comparative analysis of alternatives to the proposed Project. The other CEQA-required analyses described above are presented below.

5.2 SIGNIFICANT UNAVOIDABLE IMPACTS

LEGAL CONSIDERATIONS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the proposed Project on various aspects of the environment are discussed in detail in Chapter 3, Environmental Impact Analysis. Project-specific and cumulative impacts that cannot be avoided if the project is approved as proposed are identified below.

[1] CEQA Guidelines Sections 15126.2(a), 15126.2(c), 15126.2(d), 15126.2(e), 15126.4, and 15126.6

Impact 3.4-2: Implementation of the proposed Project would conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) regarding Vehicle Miles Traveled (VMT). (Significant and Unavoidable)

5.3 SIGNIFICANT IRREVERSIBLE EFFECTS

LEGAL CONSIDERATIONS

Under CEQA, an EIR must analyze the extent to which a project's primary and secondary effects would generally commit future generations to the allocation of nonrenewable resources and to irreversible environmental damage (CEQA Guidelines Sections 15126.2(d) and 15127). Section 15126.2(d) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project.

CEQA Section 15126.2(c) and Public Resources Code Sections 21100(b)(2) and 21100.1(a), require that the EIR include a discussion of significant irreversible environmental changes which would be involved in the proposed action, should it be implemented. Irreversible environmental effects are described as:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g., a highway provides access to previously remote area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Determining whether the proposed Project would result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed such that there would be little possibility of restoring them. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Long-Term Commitment of Resources

The proposed Project is derived from three separate factors:

1. Rezoning specific sites to HDR or MU-1, accommodating 6,616 new housing units;
2. Updating the Zoning Code citywide to increase allowable housing densities; and
3. Other citywide buildout of the General Plan, with growth anticipated through 2045.

The proposed Project would result in a total of 51,008 dwelling units at buildout, which is anticipated in 2045. This development would result in a total of 149,298 residents and 90,916 jobs.

Construction would include use of building materials such as petroleum-based products and metals that cannot reasonably be recreated. Construction also would involve significant consumption of energy, usually petroleum-based fuels that deplete supplies of nonrenewable resources. Construction of structures and infrastructure would consume energy and water. Construction debris recycling practices would be expected to allow for recovery and reuse of building materials such as concrete, lumber, and steel, and would limit disposal of these materials, some of which are non-renewable. Additionally, construction equipment would have to meet San Joaquin Valley Air Pollution Control District (SJVAPCD) standards as described in Section 3.1, Air Quality. Energy consumption is discussed in Appendix B, Initial Study Checklist.

Once residential buildout of residential uses associated with the Housing Rezone Program is complete, land uses associated with buildout of the Housing Rezone Program project would use some nonrenewable fuels to heat and light structures and would consume water. New residential uses would be required to be built and adhere to the latest adopted edition of the California Green Building Standards Code, which would reduce energy demand, water consumption, and wastewater and solid waste generation that would collectively reduce demand for resources. This would lessen emissions and generation of pollution and effluent, and so the severity of corresponding environmental effects. Due to the uncertainty regarding exact development proposals under the Housing Rezone Program, it is unknown as to exactly how individual development projects would achieve energy reduction, water conservation, and conservation of other non-renewable resources. Therefore, it is possible that implementation of the Housing Rezone Program project could result in an irretrievable commitment of non-renewable resources, and energy for heat and light and water for irrigation and plumbing could be consumed inefficiently, unnecessarily, or wastefully.

Commitment of the Project Site for Future Generations

Development allowed under the proposed Project would dedicate the project site to urbanized land uses, thereby precluding other uses for the life span of the proposed Project, generally estimated to be for the foreseeable future. The most notable impacts would be increased generation of pollutants from vehicle travel and stationary operations such as increased urban density, conversion of the land from vacant land to urban uses, and the short-term commitment of nonrenewable and/or slowly renewable natural and energy resources, such as water resources, during construction activities. Operations associated with future uses would also consume natural gas and electrical energy. The unavoidable consequences of the proposed Project are described in the appropriate sections of Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

Irreversible Environmental Damage

Development of the proposed Project would result in irretrievable commitments by introducing additional development into the City of Tracy. While some sites would be upzoned to make better use of underutilized sites, other sites that are currently vacant would be developed with urban uses. The conversion of vacant lands to urban uses would result in an irretrievable loss of open space.

A variety of resources, including land, energy, water, construction materials, and human resources would be irretrievably committed for development and infrastructure installation associated with development and operation of the proposed Project. Buildout of the Housing Rezone Program and associated cumulative growth through 2045 would require the commitment of a variety of other non-renewable or slowly renewable natural resources such as lumber and other forest products, sand and gravel, asphalt, petrochemicals, and metals.

Additionally, a variety of resources would be committed to the ongoing operation and life of the Project. The introduction of new residential uses to the city will result in an increase energy demand associated with building operations, vehicle travel, equipment operation, and other activities. Fossil fuels are the principal source of energy and the Project will increase consumption of available supplies, including gasoline and diesel fuel. These energy resource demands relate to initial construction, operation, maintenance and the transport of people and goods to and from the city that would occur with development of the proposed Project.

Development will also physically change the environment in terms of aesthetics, air emissions, noise, traffic, open space, and natural resources. These physical changes are irreversible after development occurs.

Over the past decade, the understanding of global climate change and the role that communities can play in addressing it has grown tremendously. There is a scientific consensus that recent increases in global temperatures are associated with corresponding increases of greenhouse gases (GHGs). This temperature increase is beginning to affect regional climates and is expected to result in impacts on the Central Valley region and the world. Climate change has profound implications for the availability of the natural resources on which economic prosperity and human development depend.

As discussed in detail in Section 3.2, Greenhouse Gas Emissions, GHG emissions are known to have long-term effects on atmospheric conditions that affect the global climate, with resultant changes in sea level and hydrologic conditions in rivers, heat island effects, and a range of other conditions. These changes are not considered irreversible, but they could last for generations. As described further in Section 3.2, the proposed Project could result in short-term increases in GHG emissions. However, compliance with the City's General Plan policies and programs, adherence to the development standards in the Tracy Municipal Code, as well as consistency with California Building Standards and the latest version of the CALGreen Code would ensure that potential new development associated with implementation of the Project would not directly or indirectly generate GHG emissions that may have a significant impact on the environment.

Unjustified Consumption of Resources

Resources that would be permanently and continually consumed by implementation of the proposed Project include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the unnecessary, inefficient, or wasteful use of resources (see Section 3.6, Utilities and Service Systems). The Project's operational activities would comply with all applicable building codes, including the most current version of the Title 24

Energy Efficiency Standards as well as planning policies and standard conservation features. Such compliance would ensure that natural resources are conserved to the maximum extent required under existing regulations.

It is possible that, over time, new technologies or systems will emerge, or will become more cost-effective or user-friendly, to further reduce reliance on nonrenewable natural resources. Nonetheless, construction activities for the proposed Project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment.

MANDATORY FINDINGS OF SIGNIFICANCE

CEQA Guidelines Section 15065 states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects that are individually limited, but cumulatively considerable. As defined in CEQA Guidelines Section 15065(a)(3), cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Cumulative impacts are addressed in each technical section of this EIR.

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. These impacts are discussed below.

Additionally, as required by CEQA Guidelines Section 15065(a)(4), a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. These impacts are discussed below.

Substantial Adverse Effects on Fish, Wildlife, and Plant Species

Appendix B, Initial Study Checklist, addresses impacts that might relate to the reduction of the fish or wildlife habitat, the reduction of fish or wildlife populations, and the reduction or restriction of the range of special-status species as a result of Project development. However, the Project does not propose and would not approve any development projects that would directly disturb or impact the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal to the environment. The proposed Project does not directly propose and would not approve any development that would directly disturb the rezone sites, and would not conflict with habitat plans such as the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Additionally, all sites included within the rezone program are located within the existing city limits and on parcels that are currently designated for urban type and developed site uses. As such, impacts relating to the development footprint of

parcels within the city limits were fully addressed in the General Plan EIR. Therefore, this is considered a less-than-significant impact.

5.4 GROWTH-INDUCING IMPACTS

There are two types of growth-inducing impacts: direct and indirect. To assess potential for growth-inducing impacts, General Plan Elements that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines Section 15126.2(e)). CEQA Guidelines, as interpreted by the City, state that a significant growth-inducing impact may result if implementation of the proposed Project would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);
- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list, when such infrastructure exceeds the needs of the project and could accommodate future developments.

Direct growth-inducing impacts occur when development imposes new burdens on a community by directly inducing population growth, or by leading to construction of additional developments in the same area. Secondary impacts can include the removal of physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure cannot be considered isolated from the development they facilitate and serve. Physically removing obstacles to growth, or indirectly inducing growth may provide a catalyst for future unrelated development in an area, such as a new residential community that requires additional commercial uses to support residents.

Implementing the proposed Project would continue the planned for growth in the City in a manner consistent with the vision of the City General Plan. Implementation of the proposed Project would induce some population and housing growth in Tracy, in part because it increases housing densities throughout the city, and rezones several dozen parcels to high density residential uses. This type of residential growth can be beneficial in that it would help preserve open space and agricultural lands on the periphery, and because higher density, multi-family housing would allow the City to meet its fair share housing allocation requirements. Including the proposed Project, the city is expected to have 51,008 housing units, resulting in 149,298 residents by 2045. Along with that, 90,916 jobs are anticipated. While growth would be allowed under the proposed Project, the market indicates that growth would occur in Tracy whether or not the proposed Project is adopted as growth anticipated through buildout of the existing General Plan would continue to occur. Therefore, direct population growth as a result of the proposed Project would occur, but is appropriately anticipated and planned for as part of the city's overall growth pattern and planning in the City's General Plan. The potential

environmental impacts resulting from this direct population growth is analyzed in Sections 3.1 through 3.6 of this EIR.

The rezoning of certain sites throughout the city and increased densities would not directly create any jobs. However, the proposed Project would change the jobs/housing balance from 1.35 under existing conditions to 1.78 by Project buildout in 2045. This change reflects non-residential growth planned throughout the city, and would occur regardless of the Housing Rezone Program. The Housing Rezone Program would directly provide an increase of 6,616 housing units, helping to moderate the change in jobs/housing balance. However, overall growth by 2045 would exacerbate the jobs/housing balance in the city by providing many more jobs than residential units.

Implementing the proposed Project would not require extensions of electrical, natural gas, or water utility infrastructure beyond the needs of the proposed Project, but would require connections to existing infrastructure throughout the city, commensurate with planned growth. The proposed Project would not extend urban infrastructure other than to future projects anticipated under the City's General Plan, and thus would not induce growth in other areas outside the City limits. Growth inducement to the undeveloped agricultural land to the north, south, and east of the city would not occur as that land is designated as Agricultural in the County's General Plan. The proposed Project would not oversize or extend infrastructure in the city, and would not induce growth beyond that anticipated under the City's General Plan.

Infrastructure and services would be expanded as necessary to serve City growth, without significant excess capacity, and thus would not encourage additional growth beyond that already planned for in the proposed Project. As a result, the proposed Project would create minimal to no indirect growth, and the planned buildout would be consistent with City projections.

Since the proposed Project would not result in indirect growth, negatively alter the existing jobs/housing balance, or be inconsistent with the City General Plan, growth-inducing impacts would be less than significant.

ELIMINATION OF OBSTACLES TO GROWTH

The elimination of physical obstacles to growth is considered a growth-inducing effect and one way a project may remove an impediment to growth would be through establishment of an essential public service. Here, the proposed Housing Rezone Program and General Plan Amendment would not establish an essential service such as a fire station, hospital, water treatment plant. Implementation of the Housing Rezone Program would occur in a built-out, urbanized area of the City; however, some physical constraints to growth currently exist in the city. Some growth obstacles in the city include the presence of canals and freeways, and the possibility for wildfire. Implementing the proposed Project would not eliminate the above-stated growth obstacles nor exacerbate those conditions. No infrastructure expansion would be needed to support growth anticipated under the Housing Element Programs, and the Project would not extend services to areas not already served by the existing network of infrastructure, or planned for and anticipated in infrastructure master plans. As stated earlier, the Housing Rezone Program would provide housing units to meet the city's RHNA requirement. The anticipated development would be within the growth projections

established in the General Plan and planned for in the General Plan Amendment. Therefore, the proposed Project would not induce growth beyond the growth planned for by the City.

ECONOMIC EFFECTS

Implementation of the proposed Project is anticipated to produce 50,995 new jobs and approximately 53,223 new residents. In addition to the employment growth generated by the proposed Project, additional local employment could be generated through what is commonly referred to as the *multiplier effect*. The multiplier effect refers to the secondary economic effects caused by spending from project-generated residents and employees. The multiplier effect tends to be greater in regions with larger diverse economies, given a decrease in the requirement to import goods and services from outside the region, as compared to the effects of spending in smaller economies where goods and services must be imported from elsewhere.

Two different types of additional employment are tracked through the multiplier effect. Indirect employment includes the additional jobs generated through residents' expenditure patterns and direct employment associated with the proposed Project. For example, future residents and workers throughout the city would spend money in the local and regional economy, and the expenditure of that money would result in the creation of additional jobs. Indirect jobs tend to be relatively close to places of employment and residences.

The multiplier effect also calculates *induced employment*. Induced employment follows the economic effect of employment beyond the expenditures of employees in the city to include jobs created by the stream of goods and services necessary to construct projects and support businesses in the city. For example, when a manufacturer buys or sells products, the employment associated with those inputs or outputs is considered induced employment.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees who purchase goods and services in support of the jobs created by implementation of the proposed Project. Increased employment in the city would support increased purchases of supplies, equipment, and services from businesses in Tracy and nearby cities and from businesses located elsewhere in the region. The increased spending also would initiate subsequent rounds of additional business spending by those and other businesses. Increased employment in the project area would provide increased wage and salary incomes that would support additional household spending for a wide variety of goods and services.

The Housing Rezone Program and General Plan Amendment project would not directly increase jobs in the city. However, background growth anticipated throughout the city would continue to increase through 2045, resulting in the possibility of economic growth in the city and elsewhere in the region. However, the actual environmental consequences of this type of economic growth are too speculative to predict or evaluate, because they can be spread throughout the Central Valley.

This section presents information about the proposed Project's impact on specific environmental topic areas that were determined to have no impact or a less-than-significant impact. During this evaluation, certain impacts of the Project were found to have no impact or be less than significant due to the inability of the Project to create such impacts or the absence of Project characteristics producing effects of this type. CEQA Guidelines Section 15128 requires an EIR to briefly indicate the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.

The City prepared an Initial Study to determine which environmental topics could or would not have a significant impact on the environment. The Notice of Preparation for the EIR and the accompanying Initial Study are included in Appendix A of this EIR. The Initial Study analysis considered previous environmental analyses prepared and certified for the Tracy General Plan. Those previous analyses of the Tracy General Plan which are applicable to the proposed Project include:

- Draft EIR, 2005
- Amended Draft EIR, 2006
- Draft Supplemental EIR, 2009
- Recirculated Draft Supplemental EIR, 2010
- Final Supplemental EIR, 2010
- Addendum to the General Plan Final EIR, 2011

The General Plan's previous environmental review assumed full development and buildout of the City of Tracy. The rezone program includes site rezones, municipal code amendments, and targeted General Plan updates that could increase the development capacity on some parcels within the city. All areas included within the rezone programs have previously been identified for urban site uses and as such the development footprint impacts would generally be consistent with previous environmental analysis included in the General Plan EIR. New impacts or impacts that could increase due to the rezoning program, municipal codes and General Plan updates to meet state housing goals would generally include impacts related to capacity increases from additional population and housing units.

Based on the analysis conducted in the Initial Study, the following topical areas were identified as those which the proposed Project would have no impact or a less-than-significant effect on the environment:

- Aesthetics
- Agriculture and Forestry Resources
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing

- Public Services
- Recreation
- Wildfire

The proposed Project's potential effect on these resources is discussed in the Initial Study (Appendix A) and was, therefore, not further analyzed in the EIR.

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APP LIST OF APPENDICES

Electronic versions of the Draft EIR and all of the supporting technical appendices are available at:

https://www.cityoftracy.org/our-city/departments/planning/specific-plans-environmental-impact-reports-and-initial-studies

Technical appendices are available on the City's Planning Division webpage under the "Specific Plans, Environmental Impact Reports, and Initial Studies" heading on the City's website.

Appendices

Appendix A:	Notice of Preparation (NOP) and Initial Study Checklist
Appendix B:	NOP Comment Letters
Appendix C:	Traffic Noise Calculation Inputs and Results
Appendix D:	Transportation Data
Appendix E:	Tribal Cultural Resources Data
Appendix F:	Water Supply and Wastewater Treatment Capacity Evaluations