

APPENDIX A

Notice of Preparation (NOP) and Initial Study Checklist

**NOTICE OF PREPARATION
CITY OF TRACY REZONE PROGRAM
AND GENERAL PLAN AMENDMENT
DRAFT ENVIRONMENTAL IMPACT REPORT**



Date: June 14, 2024

To: State Clearinghouse, Agencies, Organizations and Interested Parties

From: City of Tracy Planning Department

Subject: Notice of Preparation and Scoping Meeting for the Draft Environmental Impact Report for City of Tracy Rezone Program and General Plan Amendment

Scoping Meeting: July 10, 2024 at 7pm. Planning Commission Hearing, Tracy City Council Chambers

Comment Period: June 14, 2024 to July 15, 2024

NOTICE IS HEREBY GIVEN that the City of Tracy (City), as the Lead Agency, has determined that the adoption of zoning amendments and other actions needed to implement the Tracy General Plan (collectively, the proposed Project) will require preparation of an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation (NOP) is being distributed to applicable responsible agencies, trustee agencies, and interested agencies, parties, and organizations as required by CEQA. Interested agencies and parties are requested to comment on the scope and content of the significant environmental issues, mitigation measures, and reasonable alternatives to be explored in the Draft EIR. Information regarding the project description, location, public outreach process, and topics to be addressed in the Draft EIR is provided below.

Notice of Preparation 30-Day Comment Period

The City, as lead agency, is soliciting comments from responsible agencies, trustee agencies, public agencies, organizations, and members of the public regarding the scope and content of the Draft EIR, and the environmental issues and alternatives to be addressed in the Draft EIR. The City requests that responsible agencies, trustee agencies, interested parties, and the Office of Planning and Research respond in a manner consistent with Section 15082(b) of the CEQA Guidelines. Pursuant to Public Resources Code Section 21080.4, responsible agencies, trustee agencies, and the Office of Planning and Research must submit any comments in response to this notice no later than 30 days after receipt. In accordance with the time limits established by CEQA, the NOP public review period will begin on June 14, 2024 and end on July 15, 2024.

In the event that the City does not receive a response from any responsible or trustee agency by the end of the review period, the City may presume that the responsible agency or trustee agency has no response to make (CEQA Guidelines Section 15082(b)(2)). Please provide your written/typed comments (including name, affiliation, and contact information) to the address shown below by 5:00 p.m. on Monday, July 15, 2024. For additional information, please contact:

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

Scoping Meeting

The City will hold a scoping meeting to: (1) inform the public and interested agencies about the proposed Project, and (2) solicit public comment on the scope of the environmental issues to be addressed in the Draft EIR, as well as the range of alternatives to be evaluated. The date, time, and place of the Scoping Meeting is as follows:

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City of Tracy Rezone Program and General Plan Amendment Draft EIR Scoping Meeting

Wednesday, July 10, 2024, 7:00 p.m.

Tracy City Council Chambers

333 Civic Center Plaza

Tracy, CA

Project Location

Tracy is located in San Joaquin County near the intersection of several Interstate highways including: I-205, I-580 and I-5, as shown on **Figure 1**. The General Plan assesses two delineated areas known as the Sphere of Influence (SOI) and the Planning Area. A description of each is 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.

Rezone Program: **Figure 2** shows the Project's rezone areas.

Project Description

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 (SJCOC) region was adopted in 2024 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 SJCOC 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. 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.

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However, development that could occur in association with rezoning of opportunity sites under the HE Programs will result in modifications to the Zoning Ordinance and development standards to accommodate housing uses on the opportunity sites.

In order to accommodate the City's RHNA units plus a buffer for each of the income categories, the Project would rezone opportunity sites to ensure the ability to develop housing at specified densities. This included rezoning of sites to accommodate the City's RHNA units as shown on Figure 2 and in Attachment A-1 and A-2.

The 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

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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.

Additionally, 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 introduce 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 include 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

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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 planning.

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 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 240 acres and would accommodate 6,588 units. Additional details are included in the City's Housing Element, is available at www.cityoftracy.org/our-city/departments/planning. Rezone sites identified in the Housing Element are summarized in Attachment A-1 of this document. To provide logical rezone boundaries lands adjacent to the Housing Elements rezone sites are also included in the overall rezone program. These remainder rezone areas are included in Attachment A-2. The Inventory of rezones are shown in Figure 2.

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:

- o MDR – from 5.9-12 du/ac to 5.9-20 du/ac
- o MDC – from 5.9-12 du/ac to 5.9-20 du/ac
- o HDR – from 12-25 du/ac to 20-35 du/ac
- o GHC – from 12-25 du/ac to 20-35 du/ac
- o 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.

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As shown in Table 1 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 1. 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	

Sources: De Novo Planning Group, 2024, 2023 San Joaquin County Assessor Data File, Tracy Housing Element Inventory Shapefiles, Tracy Travel Demand Model (Kimley-Horn).

**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.*

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.

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.

Draft Subsequent EIR Analysis

In 2005 the City adopted a new General Plan and certified the associated General Plan EIR (State Clearinghouse (SCH) # 1992122069). The City prepared an Amended Draft EIR, 2006 (SCH# 1992122069). In 2009 the City prepared a Draft Supplemental EIR, (SCH# 2008092006), and Recirculated the Draft Supplemental EIR in 2010 (SCH# 2008092006). A Final Supplemental EIR (SCH# 2008092006) was prepaid in 2010, and an Addendum to the General Plan Final EIR, was prepared in 2011 (SCH# 2008092006).

The City will prepare a Subsequent General Plan EIR for the proposed rezone program and General Plan Amendments. The EIR will be prepared in accordance with CEQA, the CEQA Guidelines, relevant case law, and City procedures.

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Initial Study

An Initial Study has been prepared for the proposed Project. The Initial Study identifies environmental areas/issues that would result in No Impact or a Less-than-Significant Impact, and environmental areas/issues that would result in a Potentially Significant Impact. All Potentially Significant Impact areas/issues will be addressed in greater detail in the Draft Subsequent EIR. Areas/issues that would result in No Impact or a Less-than-Significant Impact, as identified in the Initial Study, or would be consistent with the analysis and findings included within the City's General Plan EIR will not be addressed further in this Subsequent EIR.

The Subsequent EIR will incorporate by reference applicable portions of the certified City of Tracy General Plan Draft EIR (inclusive of all supplements and amendments).

The EIR will analyze potentially significant impacts associated with Project buildout including adoption and implementation of the rezone program and General Plan Amendments. 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. In particular, the EIR will focus on the Project's increased development potential as a result of rezones, and impacts associated with aggregate city-wide buildout through 2045 as shown in Table 1. The EIR will evaluate a range of environmental issues contemplated under CEQA and the CEQA Guidelines as set forth in CEQA Guidelines Appendix G, except for specific topics identified below as having no impact, and where impacts are consistent with previous analysis and determinations. Where potentially significant or significant impacts are identified, the EIR will discuss mitigation measures to address the impact.

The proposed Project includes a rezone program, 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. (i.e., increased vehicle trips, GHG emissions, noise, water use, etc.).

At this time, the City anticipates that EIR will be organized in the following topical areas:

- **Air Quality** - The Draft EIR will describe the potential short- and long-term impacts of Project implementation on local and regional air quality and air quality plans based on methodologies issued by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- **Greenhouse Gases** - The Draft EIR will include a greenhouse gas emissions analysis using the San Joaquin Valley Air Pollution Control District's methodology and thresholds for evaluating a project's greenhouse gas emissions and will address the potential for the Project to conflict with an adopted plan or other regulations adopted for the purpose of reducing greenhouse gases.
- **Noise** - The Draft EIR will describe noise impacts and related mitigation needs associated with short-term construction and long-term operation (i.e., traffic, mechanical systems, etc.) associated with the Project.
- **Transportation** - The Draft EIR will describe the transportation and circulation implications of Project implementation, including impacts on the circulation system including transit, roadways, pedestrian

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and bicycle facilities, potential effects related to vehicle miles traveled, design or incompatible use hazards, and adequate emergency access.

- **Utilities/Service Systems** - The Draft EIR will describe Project implementation effects related to new or expanded water supply, sewer and wastewater treatment, storm drainage, solid waste and recycling.
- **Tribal Cultural Resources** - The Draft EIR will describe Project implementation impacts and mitigation associated with tribal cultural resources.

In addition to the potential environmental impacts noted above, the Draft EIR will evaluate potential cumulative impacts and the mandatory findings of significance associated with Project implementation. The Draft EIR will also compare the impacts of the Project to a range of reasonable alternatives, including a No Project alternative, and will identify an environmentally superior alternative.

Environmental Topics Scoped from Further Analysis

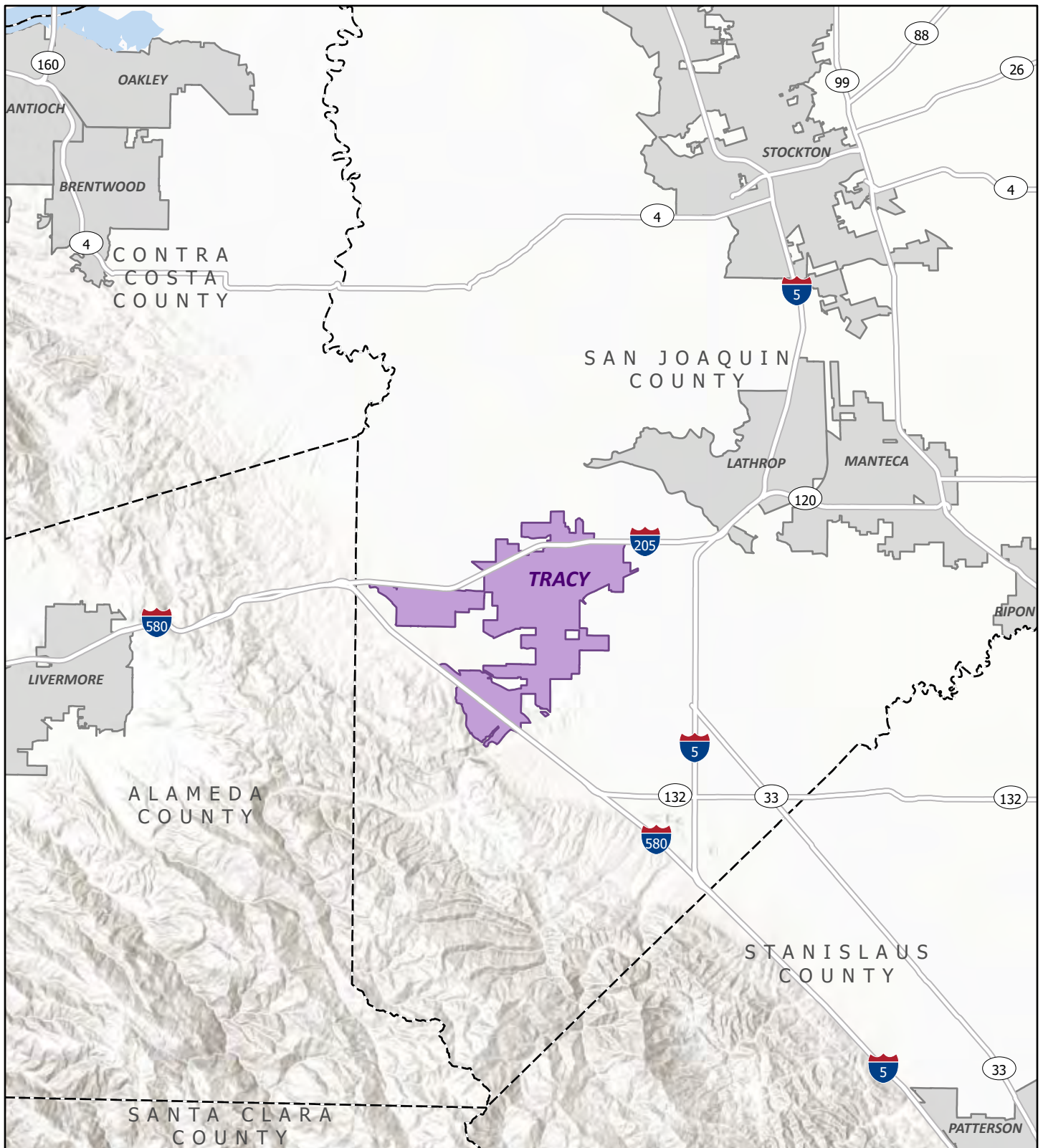
The attached Initial Study and Environmental Checklist includes a detailed discussion and analysis of environmental impacts associated with the proposed Project's rezone's and associated General Plan updates described previously. The environmental topics scoped from further analysis included:

- 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

Previous Environmental Analyses

Previous environmental analysis prepared and certified for 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



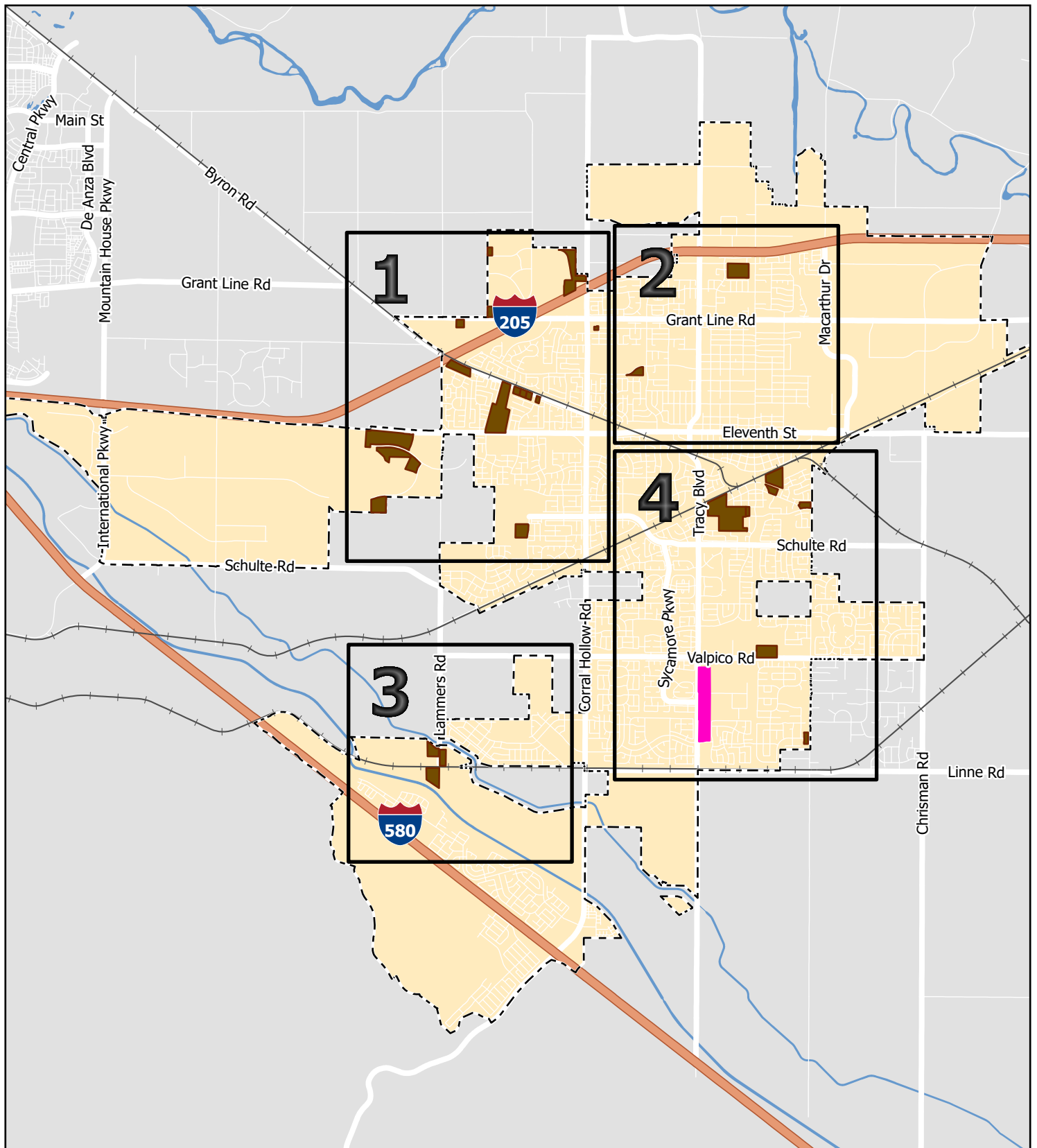
CITY OF TRACY - HOUSING ELEMENT REZONES

Legend

-  City of Tracy
-  Other Incorporated Area
-  County Boundary

Figure-1: Regional Location





City of Tracy

Rezoned Area

To be rezoned HDR - High Density Residential

To be rezoned MU1 - Mixed Use 1

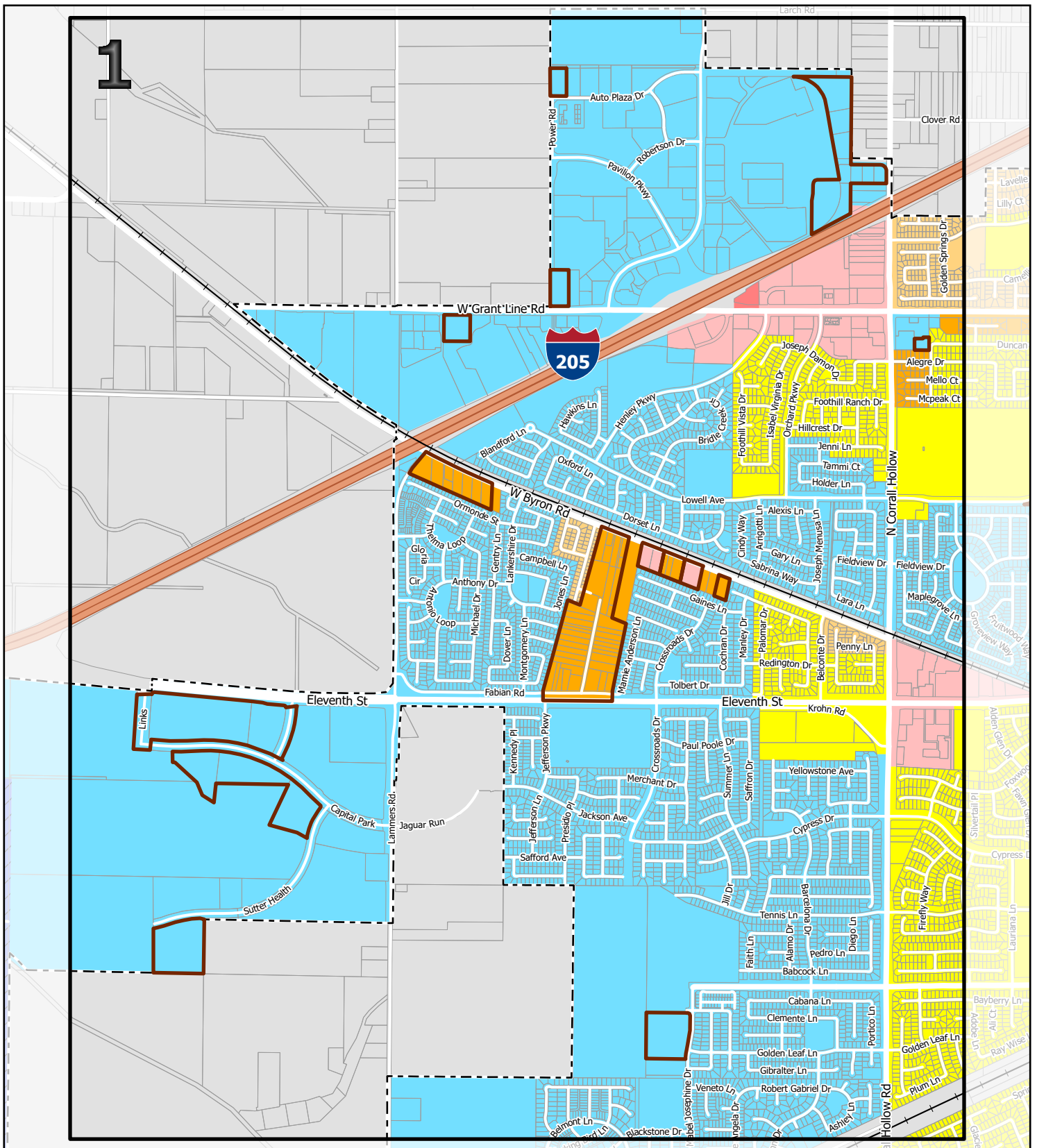
Grid Map Extents*

CITY OF TRACY - REZONE PROGRAM

Rezoned Areas Index Map



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



CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 1 Northwest Tracy

Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

LDR - Low Density Residential

MDR - Medium Density Residential

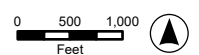
MDC - Medium Density Cluster

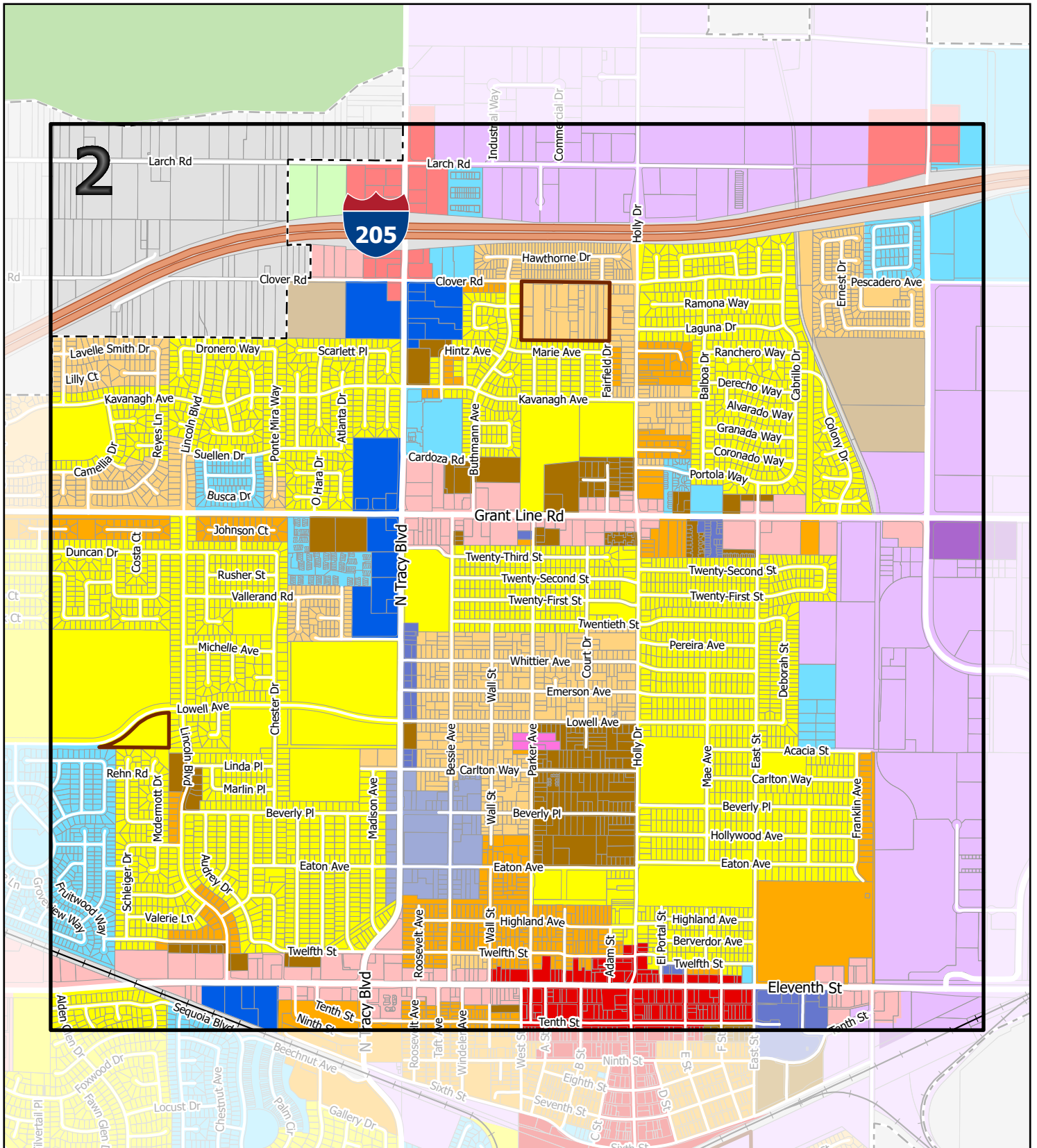
PUD - Planned Unit Development

HS - Highway Service

GHC - General Highway Commercial

CRSP - Cordes Ranch Specific Plan





Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

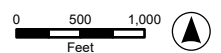
LDR - Low Density Residential
MDR - Medium Density Residential
MDC - Medium Density Cluster

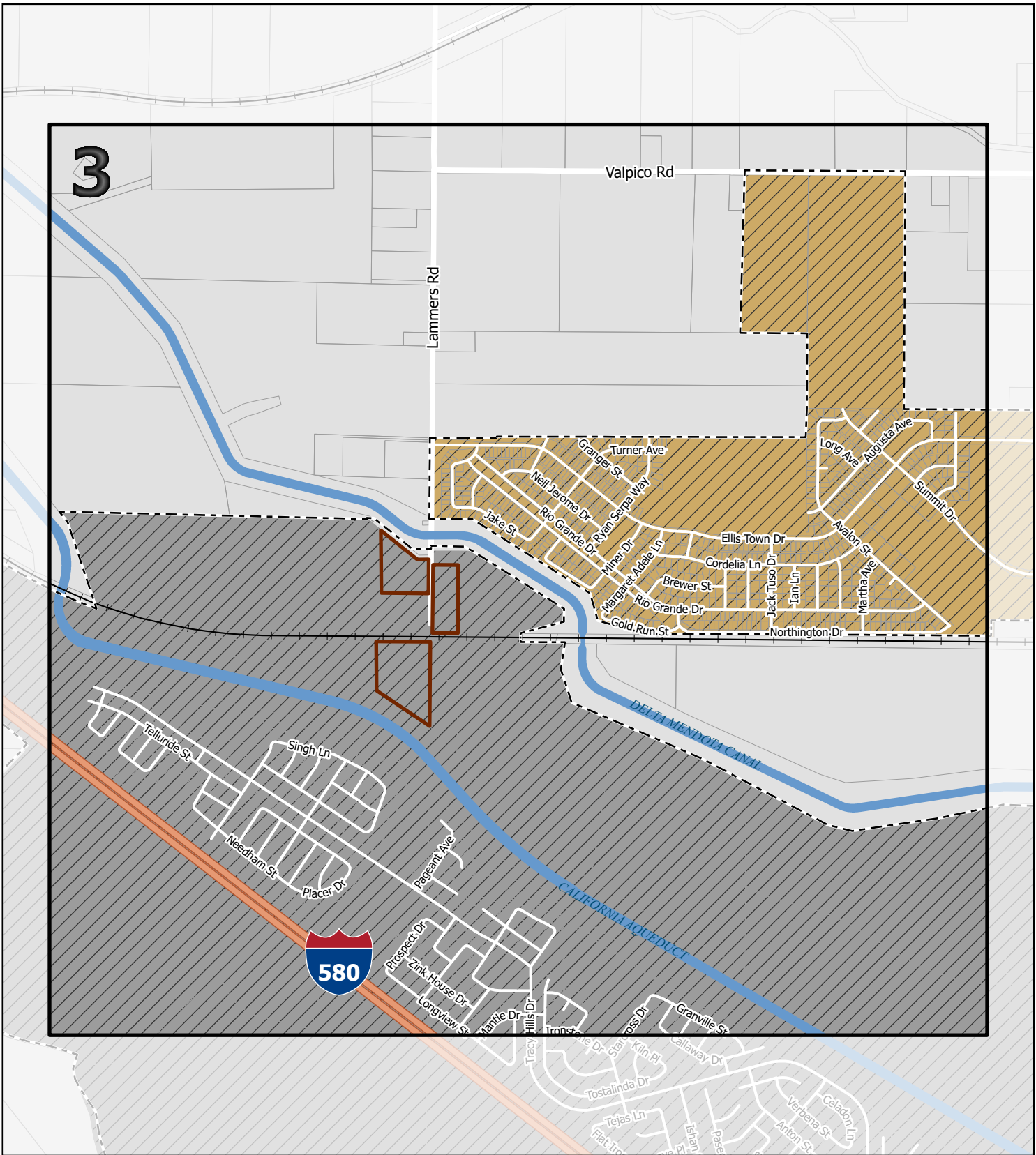
HDR - High Density Residential
RMH - Residential Mobile Home
PUD - Planned Unit Development
M1 - Light Industrial
M2 - Heavy Industrial
NS - Neighborhood Shopping
CS - Community Shopping Center
CBD - Central Business District

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

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 2 North/Central Tracy





Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

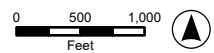
E - Ellis Park Specific Plan

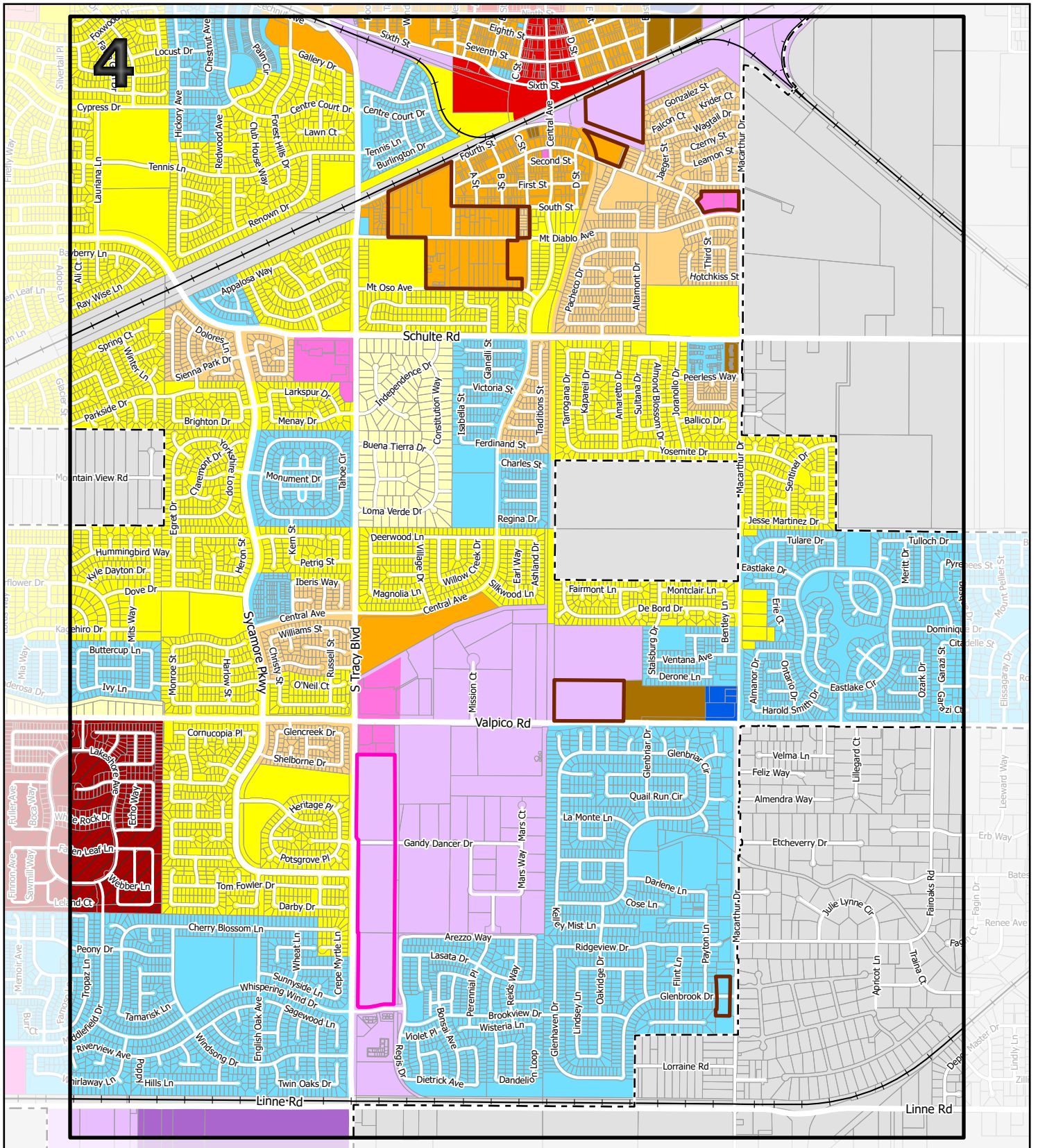
THSP - Tracy Hills Specific Plan

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 3

Southwest Tracy/Canals





Tracy City Limits

Rezoning Area

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

Current Zoning Designation

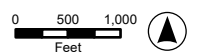
- RE - Residential Estate
- LDR - Low Density Residential

- 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

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 4 Central/South Tracy



Attachment A-1 Housing Rezone Sites Inventory Table

APN	Address	Size (Acres)	General Plan Designation (Current)	Current Zoning	Proposed Zoning	Existing Units	Total Units	Existing Use
20925050	SW of intersection of Capitol Park Dr and S Lammers Rd	10	Office	PUD	HDR	0	298	Vacant
20947002	W of intersection of W 11th St and S Lammers Rd	3.7		PUD	HDR	0	111	Vacant
20947003	W of intersection of W 11th St and S Lammers Rd	19.3	Office	PUD	HDR	0	575	Vacant
20947004	W of intersection of W 11th St and S Lammers Rd	6.7	Office	PUD	HDR	0	198	Vacant
20947005	NW of intersection of S Lammers Rd and Capitol Park Rd	2.4		PUD	HDR	0	73	Vacant
20947009	W of intersection of S Lammers Rd and Capitol Park Rd	6.1	Office	PUD	HDR	0	181	Vacant
20947010	W of intersection of S Lammers Rd and Capitol Park Rd	7.4	Office	PUD	HDR	0	220	Vacant
20947011	Intersection of S Lammers Rd and Capitol Park Rd	7	Office	PUD	HDR	0	209	Vacant
21205035	3200 Naglee Rd	4.7	Commercial	I-205	HDR	0	139	Vacant
21205036	N of intersection of W Valley Mall and Naglee Rd	2.2	Commercial	I-205	HDR	0	65	Vacant
21205037	Intersection of W Valley Mall and Naglee Rd	1.9	Commercial	I-205	HDR	0	58	Vacant
21205038	3100 N Corral Hollow Rd	1	Commercial	I-205	HDR	0	29	Vacant
21205039	W of intersection of W Valley Mall and Coral Hollow Rd	0.9	Commercial	I-205	HDR	0	28	Vacant
21205040	Southside of W Valley Mall	0.9	Commercial	I-205	HDR	0	28	Vacant
21205041	Intersection of Naglee Rd and W Valley Mall	1	Commercial	I-205	HDR	0	29	Vacant
21205042	S of intersection of Naglee Rd and W Valley Mall	2.1	Commercial	I-205	HDR	0	62	Vacant
21205052	3150 Naglee Rd	4.9	Commercial	I-205	HDR	0	146	Commercial/Retail
21227020	Intersection of Power Rd and Auto Plaza Rd	2	Commercial	PUD	HDR	0	60	Vacant
21229021	2855 W Grant Line Rd	3	Commercial	PUD	HDR	0	88	Vacant
21443001	348 W Clover Rd	0.8	Residential Medium	MDC	HDR	0	24	Residential
21443004	292 W Clover Rd	1.9	Residential Medium	MDC	HDR	0	57	Residential
21443023	188 W Clover Rd	1	Residential Medium	MDC	HDR	1	27	Residential
21443046	W of intersection of W Clover Rd and Briar Ln	0.8	Residential Medium	MDC	HDR	0	23	Vacant
21443047	N of intersection of Dovenshire Dr and Marie Ave	1.1	Residential Medium	MDC	HDR	0	31	Vacant
23202055	Intersection of Duncan Dr and Enyeart Rd	0.8	Commercial	PUD	HDR	0	23	Vacant
23213010	Intersection of W Lowell Ave and Lincoln Blvd	3.8	Public Facilities	LDR	HDR	0	113	School District Property
23510013	310 W Mt Diablo Av	0.6	Residential Medium	MDR	HDR	0	16	Residential
23510015	302 W Mt Diablo Av	1	Residential Medium	MDR	HDR	1	29	Residential
23510018	220 W Mt Diablo Av	1	Residential Medium	MDR	HDR	0	30	Residential
23510024	130 W Mt Diablo Av	1	Residential Medium	MDR	HDR	1	28	Residential
23510042	90 W Mt Diablo Av	1.5	Residential Medium	MDR	HDR	1	44	Residential
23510071	280 W Mt Diablo Av	1.3	Residential Medium	MDR	HDR	0	37	Residential
23510072	Intersection of Mt Oso Ave and Gianelli St	0.7	Residential Medium	MDR	HDR	0	21	Residential
23510073	250 W Mt Diablo Av	2	Residential Medium	MDR	HDR	1	57	Residential
23512001	205 E Third St	2.9	Residential Medium	MDR	HDR	1	86	Residential
23515002	780 E Sixth St	11.9	Downtown	M1	HDR	0	354	Vacant
23512002	207 E Third St	0.3	Residential Medium	MDR	HDR	0	9	Residential
23514009	Intersection of E 3rd St and E Mt Diablo Ave	2	Commercial	NS	HDR	0	60	Vacant
23514010	Intersection of E Mt Diablo Ave and S MacArthur Dr	1.2	Commercial	NS	HDR	0	36	Vacant
23542005	550 W Fourth St	0.3	Residential Medium	MDR	HDR	0	9	Church, Synagogue Or Temple
23542006	491 W Mt Diablo Av	0.6	Residential Medium	MDR	HDR	0	17	Church, Synagogue Or Temple
23542007	524 W Fourth St	0.5	Residential Medium	MDR	HDR	1	15	Residential
23542008	489 W Mt Diablo Av	0.9	Residential Medium	MDR	HDR	0	25	Church, Synagogue Or Temple
23542009	510 W Fourth St	0.8	Residential Medium	MDR	HDR	1	21	Residential
23542012	440 W Fourth St	0.5	Residential Medium	MDR	HDR	0	16	Vacant
23542013	E of intersection of Diablo Pl and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	15	Vacant
23543006	251 W Mt Diablo Av	0.9	Residential Medium	MDR	HDR	1	25	Residential
23543009	211 W Mt Diablo Av	0.3	Residential Medium	MDR	HDR	0	8	Residential
23543011	201 W Mt Diablo Av	0.3	Residential Medium	MDR	HDR	0	8	Residential
23543013	10009 W Mt Diablo Av	0.4	Residential Medium	MDR	HDR	0	11	Residential
23543014	W of intersection of West St and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	16	Residential
23543016	W of intersection of C St and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	14	Residential
23543017	100 W South St	0.6	Residential Medium	MDR	HDR	1	16	Residential
23543018	90 W South St	0.6	Residential Medium	MDR	HDR	1	16	Residential
23543019	70 W South St	1.1	Residential Medium	MDR	HDR	1	32	Residential
23805002	1381 Berg Av	2.6	Residential Medium	MDR	HDR	0	76	Residential
23805003	2748 W Byron Rd	1	Residential Medium	MDR	HDR	2	28	Residential
23805008	2718 W Byron Rd	1.7	Residential Medium	MDR	HDR	1	48	Residential
23805015	2600 W Byron Rd	1.1	Commercial	GHC	HDR	2	29	Residential
23805016	2590 W Byron Rd	0.5	Residential Medium	MDR	HDR	2	13	Residential

APN	Address	Size (Acres)	General Plan Designation (Current)	Current Zoning	Proposed Zoning	Existing Units	Total Units	Existing Use
23805017	2568 W Byron Rd	0.5	Residential Medium	MDR	HDR	2	13	Residential
23805022	2430 W Byron Rd	1.3	Residential Medium	MDR	HDR	0	40	Residential
23805023	1341 Berg Av	1.1	Residential Medium	MDR	HDR	1	33	Residential
23806005	1240 Berg Av	0.5	Residential Medium	MDR	HDR	1	14	Residential
23806009	1180 Berg Av	1	Residential Medium	MDR	HDR	1	29	Residential
23806013	1150 Berg Av	1.2	Residential Medium	MDR	HDR	1	36	Residential
23806018	2881 Fabian Rd	1.1	Residential Medium	MDR	HDR	3	29	Residential
23806021	1191 Berg Av	0.8	Residential Medium	MDR	HDR	2	22	Residential
23806024	1241 Berg Av	0.8	Residential Medium	MDR	HDR	1	23	Residential
23806029	1121 Berg Av	0.8	Residential Medium	MDR	HDR	1	23	Residential
23807004	3150 W Byron Rd	0.6	Residential Medium	MDR	HDR	0	18	Residential
23807005	3160 W Byron Rd	0.5	Residential Medium	MDR	HDR	1	12	Residential
23807006	3130 W Byron Rd	1.1	Residential Medium	MDR	HDR	1	31	Residential
23807007	3110 W Byron Rd	1	Residential Medium	MDR	HDR	1	29	Residential
23807008	3090 W Byron Rd	1.1	Residential Medium	MDR	HDR	1	31	Residential
23860007	3140 W Grant Line Rd	3	Commercial	PUD	HDR	0	89	Residential
24005037	Intersection of W Schulte Rd and Mabel Josephine Dr	10	Urban Reserve 7	PUD	HDR	0	298	Vacant
24014027	4720 S Lammers Rd	5	Industrial	M1-TH	HDR	1	148	Agricultural
24614001	26805 S Mac Arthur Dr	10	Residential High	M1	HDR	0	298	Residential
24865041	546 Glenbrook Dr	1	Residential Low	PUD	HDR	1	29	Residential
24865042	545 Glenbrook Dr	1	Residential Low	PUD	HDR	0	30	Residential
25105008	27901 S Lammers Rd	5	Residential Medium	MDR-TH	HDR	0	149	Agricultural
25105009	28281 S Lammers Rd	10	Residential Medium	MDR-TH	HDR	0	298	Vacant
24802017	Intersection of S Tracy Blvd and Gandy Dancer Dr	14.3	Office	M1	New MU1	0	250	Residential
24803005	4800 S Tracy Bl	14.3	Office	M1	New MU1	0	250	Residential
24803010	4100 S Tracy Bl	11.8	Office	M1	New MU1	0	206	Residential
TOTAL		239.8				38	6588	

ATTACHMENT A-2 REZONE INVENTORY TABLE (Remainder)

APN	ADDRESS	EX_ZONING	PROP_ZONING	SITE_ACRES
235-440-07	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-08	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.08
235-100-74	85 MT OSO AVE	MDR	HDR	0.19
235-100-75	65 MT OSO AVE	MDR	HDR	0.19
235-100-76	45 MT OSO AVE	MDR	HDR	0.19
235-440-06	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-04	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-05	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-100-41	91 MT OSO AVE	MDR	HDR	0.95
235-100-25	125 MT OSO AVE	MDR	HDR	0.48
235-100-23	155 MT OSO AVE	MDR	HDR	0.48
235-100-21	175 MT OSO AVE	MDR	HDR	0.48
235-100-62	215 MT OSO AVE	MDR	HDR	0.48
235-100-61	225 MT OSO AVE	MDR	HDR	0.49
235-440-03	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-02	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.10
235-440-01	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	2.08
235-100-22	150 W MT DIABLO AVE	MDR	HDR	0.49
235-100-20	170 W MT DIABLO AVE	MDR	HDR	0.49
235-100-66	370 W MT DIABLO AVE	MDR	HDR	0.73
235-210-09	19 S C ST	MDC	HDR	0.10
235-210-10	61 W MT DIABLO AVE	MDC	HDR	0.09
235-210-11	65 W MT DIABLO AVE	MDC	HDR	0.09
235-430-04	275 W MT DIABLO AVE	MDR	HDR	0.13
235-210-08	105 S C ST	MDC	HDR	0.12
235-210-07	85 S C ST	MDC	HDR	0.12
235-420-11	469 W MT DIABLO AVE	MDR	HDR	0.18
235-430-03	6 WEST ST	MDR	HDR	0.12
235-210-06	65 S C ST	MDC	HDR	0.12
235-210-05	45 S C ST	MDC	HDR	0.12
235-430-02	58 WEST ST	MDR	HDR	0.12
235-210-04	25 S C ST	MDC	HDR	0.12
235-430-35	MT DIABLO AVE BETWEEN W SOUTH ST AND C ST	MDR	HDR	0.16
235-420-10	449 W MT DIABLO AVE	MDR	HDR	0.52
235-210-03	56 W SOUTH ST	MDC	HDR	0.09
235-210-02	60 W SOUTH ST	MDC	HDR	0.08
235-210-01	66 W SOUTH ST	MDC	HDR	0.08
235-430-15	130 W SOUTH ST	MDR	HDR	0.66
235-430-12	190 W SOUTH ST	MDR	HDR	0.19
235-430-10	200 W SOUTH ST	MDR	HDR	0.25
235-430-34	212 W SOUTH ST	MDR	HDR	0.14
235-430-07	246 W SOUTH ST	MDR	HDR	0.18
235-430-05	256 W SOUTH ST	MDR	HDR	0.15
235-430-01	296 W SOUTH ST	MDR	HDR	0.16
235-420-15	375 W MT DIABLO AVE	MDR	HDR	3.12
235-420-14	416 W FOURTH ST	MDR	HDR	0.27
238-060-11	2721 FABIAN RD	MDR	HDR	0.66
238-060-12	2741 FABIAN RD	MDR	HDR	0.59
238-060-15	2831 FABIAN RD	MDR	HDR	0.66
238-060-16	2851 FABIAN RD	MDR	HDR	0.44
238-060-30	1151 BERG AVE	MDR	HDR	0.72
238-060-17	2861 FABIAN RD	MDR	HDR	0.49
238-060-10	1160 BERG AVE	MDR	HDR	1.03
238-060-19	1161 BERG AVE	MDR	HDR	0.86
238-060-20	1181 BERG AVE	MDR	HDR	0.81
238-060-08	1210 BERG AVE	MDR	HDR	0.50
238-060-07	1220 BERG AVE	MDR	HDR	0.47
238-060-06	1230 BERG AVE	MDR	HDR	0.51
238-060-22	1221 BERG AVE	MDR	HDR	0.82
238-060-23	1231 BERG AVE	MDR	HDR	0.81
238-060-04	1260 BERG AVE	MDR	HDR	0.71
238-060-03	1270 BERG AVE	MDR	HDR	0.55
238-060-25	1261 BERG AVE	MDR	HDR	0.45
238-060-26	1271 BERG AVE	MDR	HDR	0.35
238-060-27	1281 BERG AVE	MDR	HDR	0.82
238-060-02	1290 BERG AVE	MDR	HDR	1.33
238-060-28	1301 BERG AVE	MDR	HDR	0.80
238-050-12	1320 BERG AVE	MDR	HDR	0.31
238-050-11	2688 W BYRON RD	MDR	HDR	1.04
238-050-18	2550 W BYRON RD	MDR	HDR	1.06
238-050-10	2686 W BYRON RD	MDR	HDR	0.26
238-050-09	2684 W BYRON RD	MDR	HDR	0.49
238-050-07	2698 W BYRON RD	MDR	HDR	0.23
238-050-06	2710 W BYRON RD	MDR	HDR	0.85
238-050-05	2726 W BYRON RD	MDR	HDR	0.70
238-050-04	2734 W BYRON RD	MDR	HDR	0.37
238-070-09	3060 W BYRON RD	MDR	HDR	1.11
238-070-03	3190 W BYRON RD	MDR	HDR	1.30
238-070-02	3220 W BYRON RD	MDR	HDR	1.55
214-430-17	250 W CLOVER RD	MDC	HDR	0.21
214-430-16	232 W CLOVER RD	MDC	HDR	0.25
214-430-03	324 W CLOVER RD	MDC	HDR	0.83
214-430-25	172 W CLOVER RD	MDC	HDR	0.49
214-430-15	236 W CLOVER RD	MDC	HDR	0.26
214-430-08	280 W CLOVER RD	MDC	HDR	0.49
214-430-06	282 W CLOVER RD	MDC	HDR	0.51
214-430-18	202 W CLOVER RD	MDC	HDR	0.53
214-430-19	208 W CLOVER RD	MDC	HDR	0.05
214-430-02	332 W CLOVER RD	MDC	HDR	0.31
214-430-14	242 W CLOVER RD	MDC	HDR	0.20
214-430-43	246 W CLOVER RD	MDC	HDR	0.16
214-430-20	212 W CLOVER RD	MDC	HDR	0.15
214-430-21	216 W CLOVER RD	MDC	HDR	0.13
214-430-28	108 W CLOVER RD	MDC	HDR	0.42
214-430-27	134 W CLOVER RD	MDC	HDR	0.96
214-430-26	150 W CLOVER RD	MDC	HDR	0.29
214-430-24	136 W CLOVER RD	MDC	HDR	0.47
214-430-22	222 W CLOVER RD	MDC	HDR	0.10
214-430-42	W CLOVER RD AT W GABRIEL DR	MDC	HDR	0.44
214-430-07	276 W CLOVER RD	MDC	HDR	0.38
214-430-05	286 W CLOVER RD	MDC	HDR	0.42
238-060-01	1311 BERG AVE	MDR	HDR	0.82



INITIAL STUDY / ENVIRONMENTAL CHECKLIST

FOR THE

CITY OF TRACY REZONE PROGRAM AND GENERAL PLAN AMENDMENT

JUNE 2024

Prepared for:

City of Tracy
Planning Division
333 Civic Center Plaza
Tracy, CA 95376

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818



D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



INITIAL STUDY / ENVIRONMENTAL CHECKLIST

FOR THE

CITY OF TRACY REZONE PROGRAM AND GENERAL PLAN
AMENDMENT

JUNE 2024

Prepared for:

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PROJECT TITLE

City of Tracy Rezone Program and General Plan Amendment

LEAD AGENCY NAME AND ADDRESS

City of Tracy
Planning Division
333 Civic Center Plaza
Tracy, CA 95376

CONTACT PERSON AND PHONE NUMBER

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PROJECT LOCATION

Tracy is located in San Joaquin County near the intersection of several Interstate highways including: I-205, I-580 and I-5. See **Figure 1**, Regional Location Map. General Plan assesses two delineated areas known as the Sphere of Influence (SOI) and the Planning Area. A description of each is 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.

Rezone Program: **Figure 2** shows the Project's rezone areas.

PROJECT DESCRIPTION

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 (SJCOC) region was adopted in 2024 as an amendment to the Tracy General Plan. The Housing Element update is mandated by State law. The Housing Element establishes goals, 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. 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.

However, development that could occur in association with rezoning of opportunity sites under the HE Programs will modifications to the Zoning Ordinance, and development standards to accommodate housing uses on the opportunity sites.

In order to accommodate the City's RHNA units plus a buffer for each of the income categories, the Project would rezone opportunity sites to ensure the ability to develop housing at specified densities. This included rezoning of sites to accommodate the City's RHNA units, and to provide logical rezone boundaries as shown on Figure 2 and in Attachments A-1 and A-2.

The 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:

- 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

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 locating 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 offstreet 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.

Additionally, 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 include 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 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 rezone sites identified in the Housing Element total approximately 240 acres and would accommodate 6,588 units.

Additional details are included in the City's Housing Element, is available at www.cityoftracy.org/our-city/departments/planning. Rezone sites identified in the Housing Element are summarized in Attachment A-1 of this document. To provide logical rezone boundaries lands adjacent to the Housing Elements rezone sites are also included in the overall rezone program. These remainder rezone areas are included in Attachment A-2. The Inventory of rezones are shown in Figure 2.

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:

- o MDR – from 5.9-12 du/ac to 5.9-20 du/ac
- o MDC – from 5.9-12 du/ac to 5.9-20 du/ac
- o HDR – from 12-25 du/ac to 20-35 du/ac
- o GHC – from 12-25 du/ac to 20-35 du/ac
- o 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 1 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 1. 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	

Sources: De Novo Planning Group, 2024, 2023 San Joaquin County Assessor Data File, Tracy Housing Element Inventory Shapefiles, Tracy Travel Demand Model (Kimley-Horn).

*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.

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.

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.

DRAFT SUBSEQUENT EIR ANALYSIS

In 2005 the City adopted a new General Plan and certified the associated General Plan EIR (State Clearinghouse (SCH) # 1992122069). The City prepared an Amended Draft EIR, 2006 (SCH# 1992122069). In 2009 the City prepared a Draft Supplemental EIR, (SCH# 2008092006), and Recirculated the Draft Supplemental EIR in 2010 (SCH# 2008092006). A Final Supplemental EIR (SCH# 2008092006) was prepaid in 2010, and an Addendum to the General Plan Final EIR, was prepared in 2011 (SCH# 2008092006).

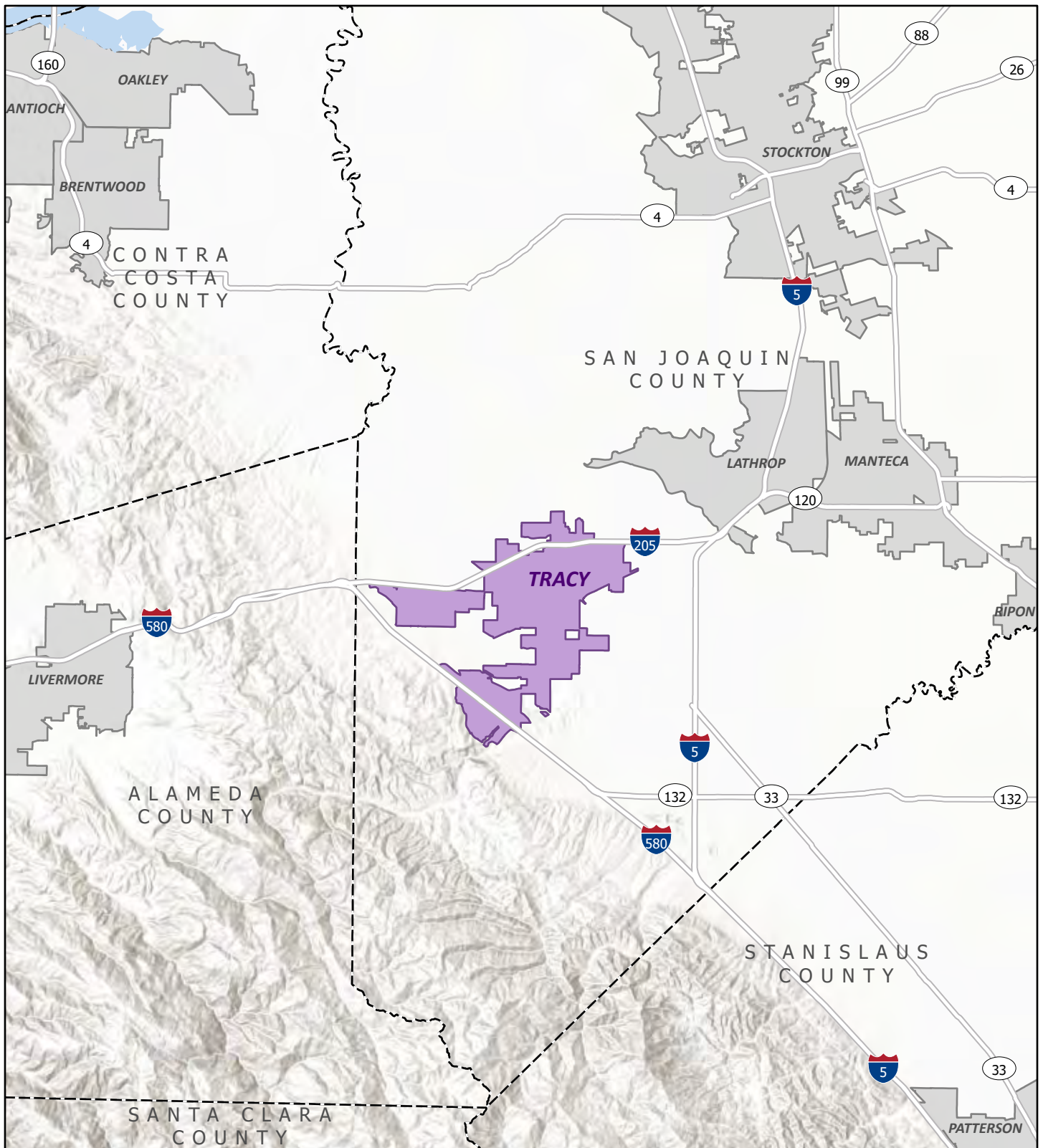
The City will prepare a Subsequent General Plan EIR for the proposed rezone program and General Plan Amendments. The EIR will be prepared in accordance with CEQA, the CEQA Guidelines, relevant case law, and City procedures.

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. (i.e. increased vehicle trips, GHG, noise, water use ect.).

PROJECT-SPECIFIC ENVIRONMENTAL REVIEW

The attached Initial Study and Environmental Checklist includes a discussion and analysis of environmental impacts associated with the proposed Project. Prior to any development, a site-specific development application would be required.

INITIAL STUDY: An Initial Study has been prepared for this project. The Initial Study identifies environmental areas/issues that would result in No Impact or a Less-than-Significant Impact, and environmental areas/issues that would result in a Potentially Significant Impact. All Potentially Significant Impact areas/issues will be addressed in greater detail in the Draft SEIR. Areas/issues that would result in No Impact or a Less-than-Significant Impact, as identified in the Initial Study, will not be addressed further in the Draft SEIR.

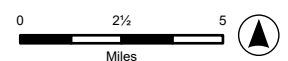


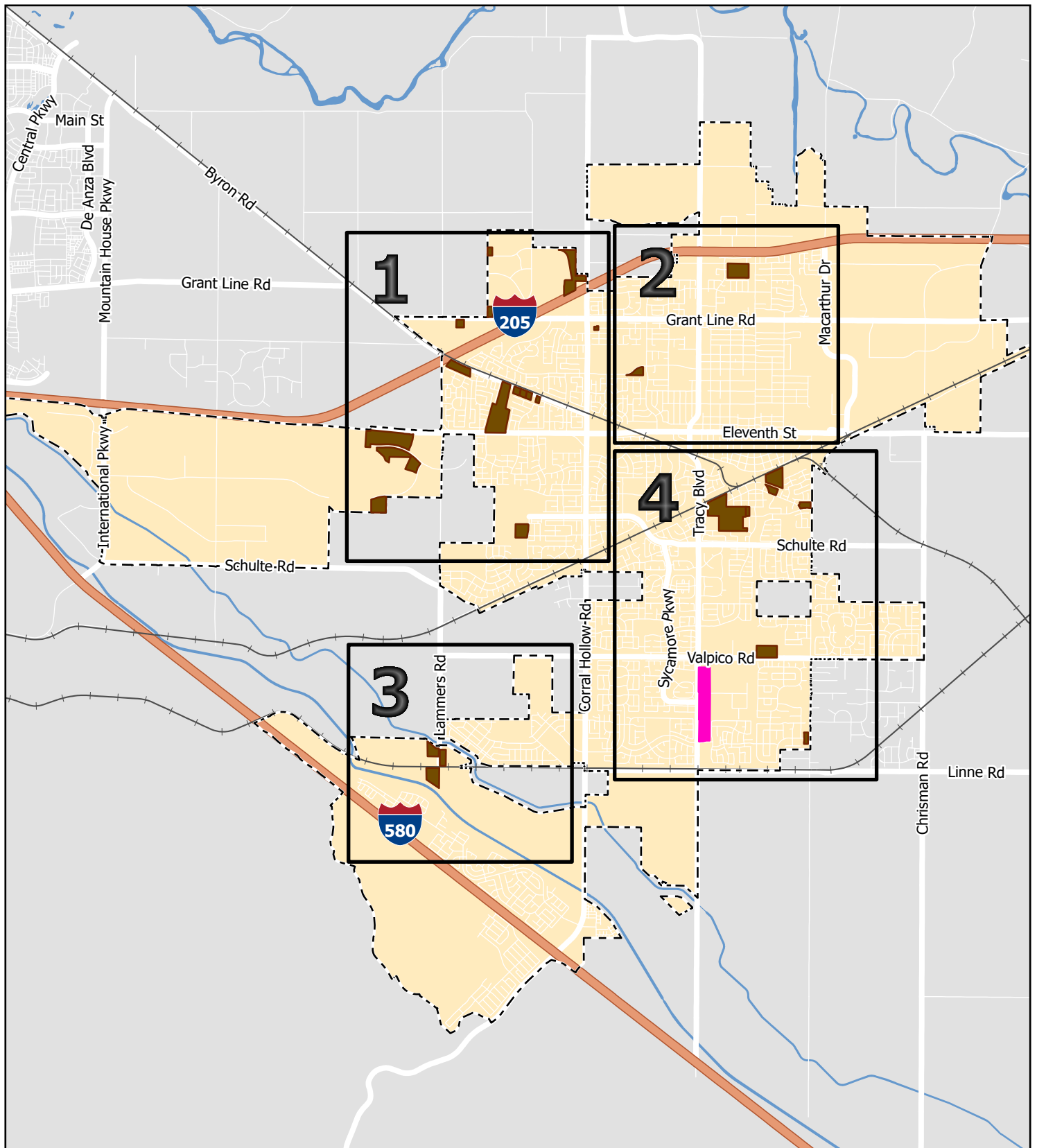
CITY OF TRACY - HOUSING ELEMENT REZONES

Legend

-  City of Tracy
-  Other Incorporated Area
-  County Boundary

Figure-1: Regional Location





City of Tracy

Rezoned Area

To be rezoned HDR - High Density Residential

To be rezoned MU1 - Mixed Use 1

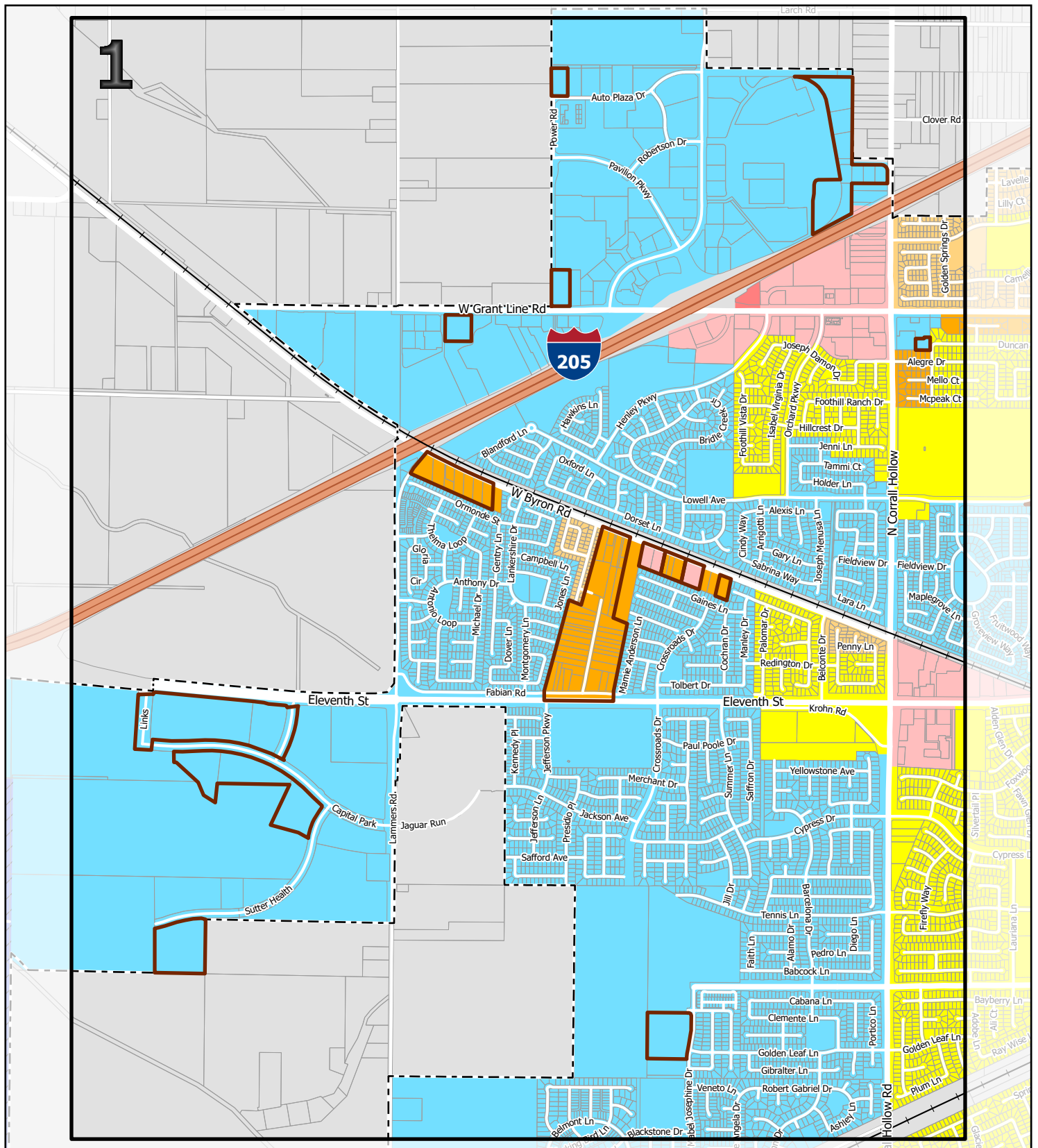
Grid Map Extents*

CITY OF TRACY - REZONE PROGRAM

Rezoned Areas Index Map



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



CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 1 Northwest Tracy

Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

LDR - Low Density Residential

MDR - Medium Density Residential

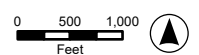
MDC - Medium Density Cluster

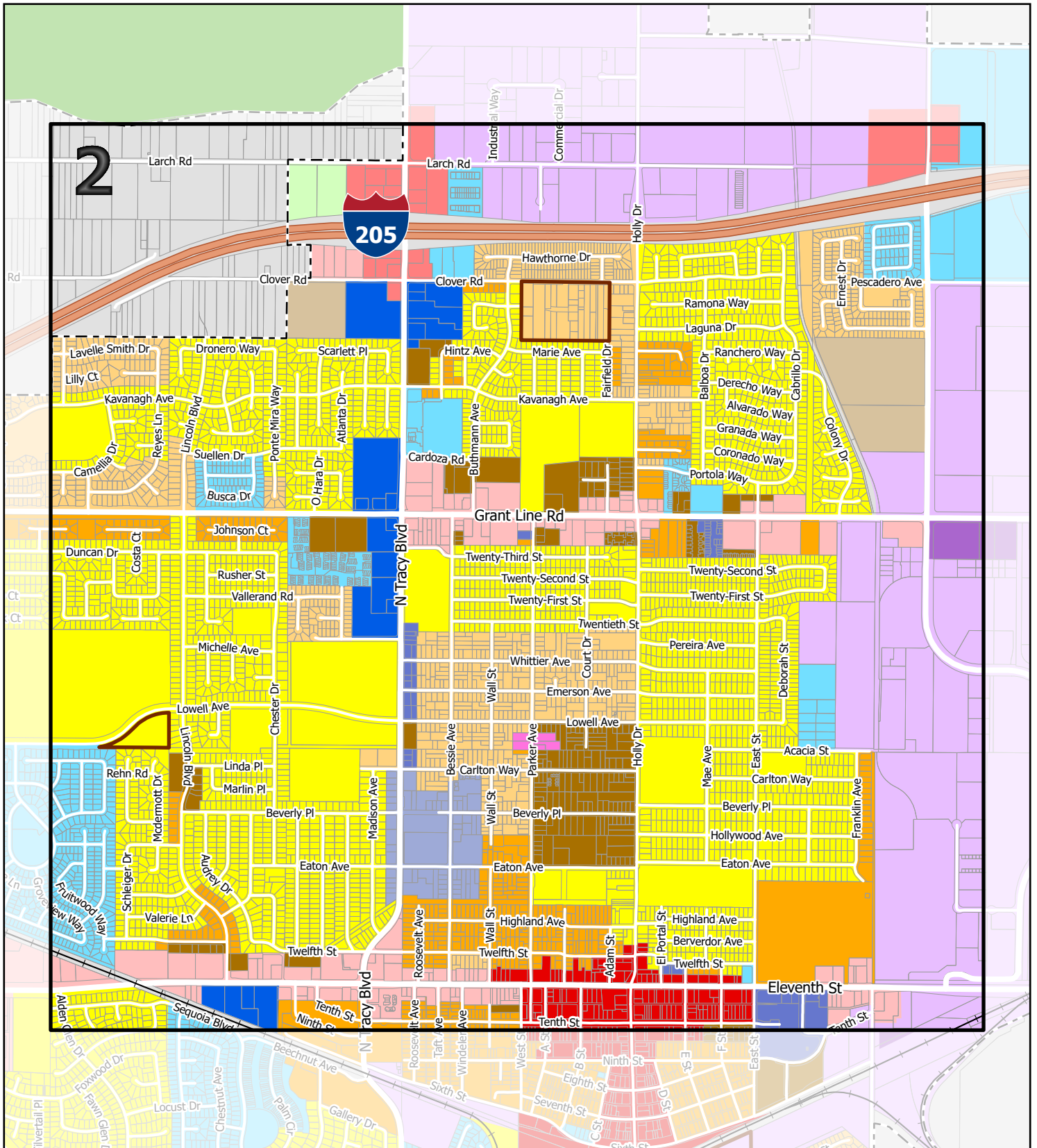
PUD - Planned Unit Development

HS - Highway Service

GHC - General Highway Commercial

CRSP - Cordes Ranch Specific Plan





Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

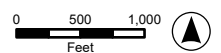
LDR - Low Density Residential
MDR - Medium Density Residential
MDC - Medium Density Cluster

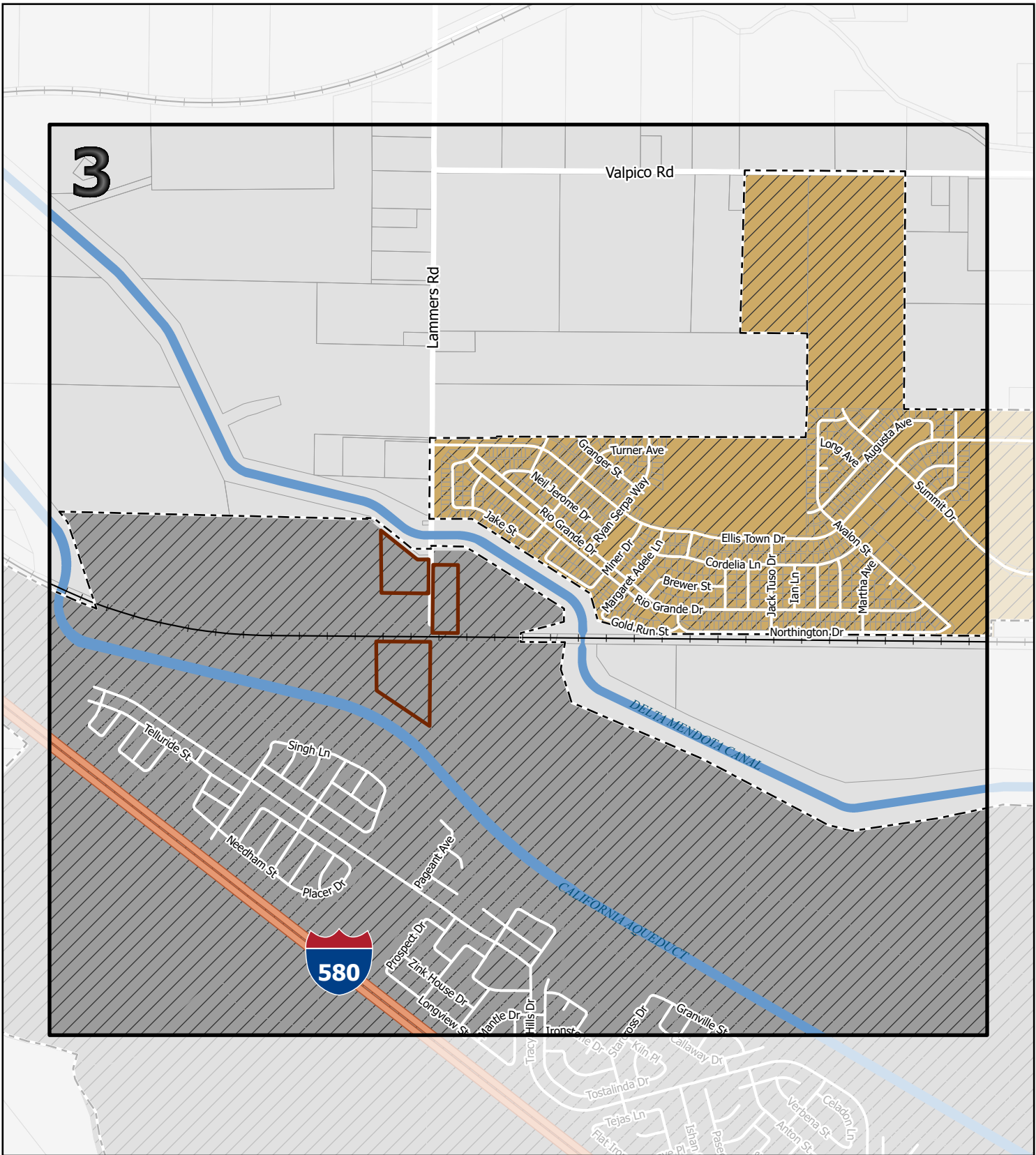
HDR - High Density Residential
RMH - Residential Mobile Home
PUD - Planned Unit Development
M1 - Light Industrial
M2 - Heavy Industrial
NS - Neighborhood Shopping
CS - Community Shopping Center
CBD - Central Business District

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

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 2 North/Central Tracy





Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

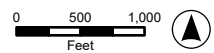
E - Ellis Park Specific Plan

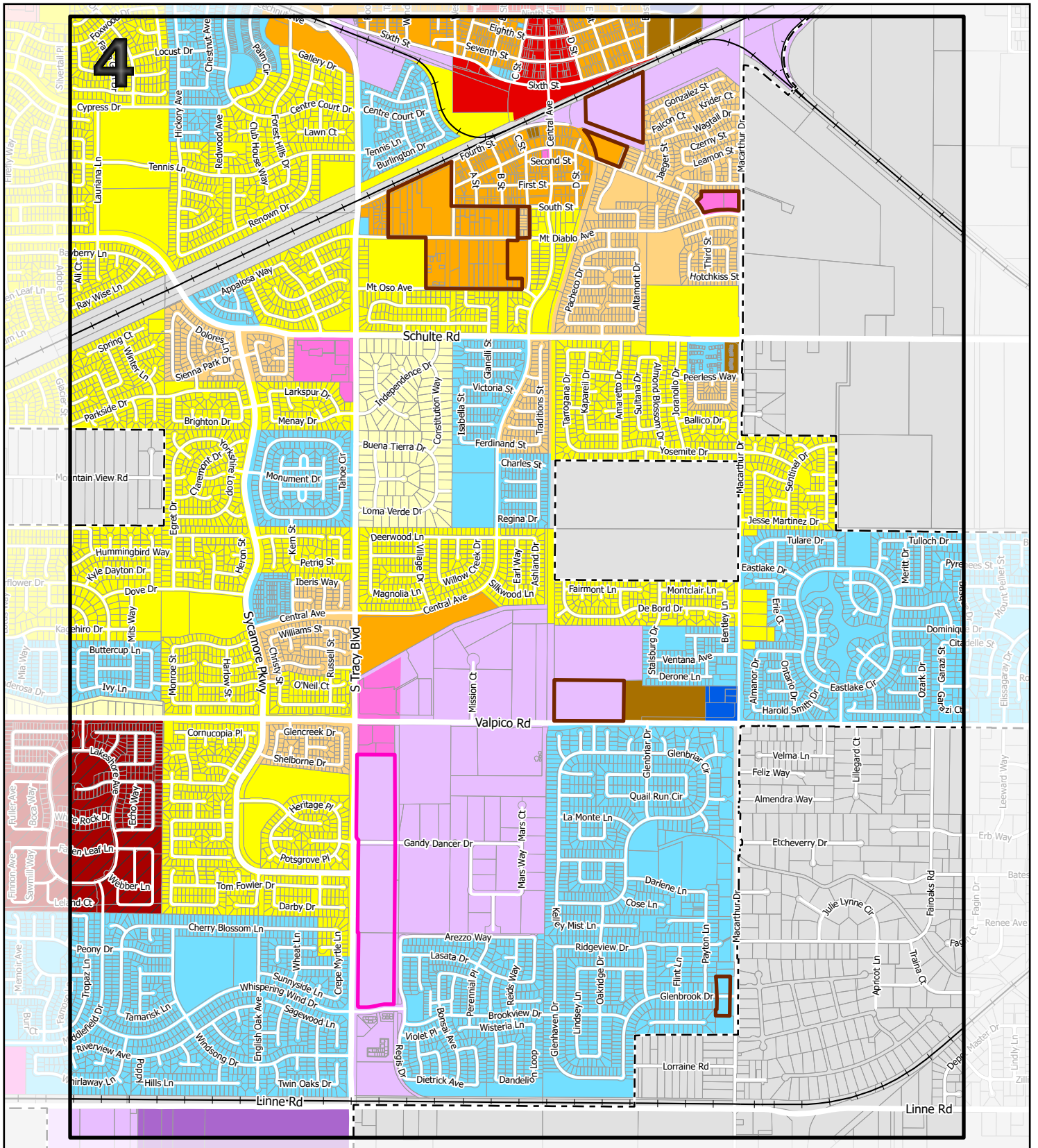
THSP - Tracy Hills Specific Plan

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 3

Southwest Tracy/Canals





Tracy City Limits

Rezoning Area

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

Current Zoning Designation

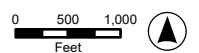
- RE - Residential Estate
- LDR - Low Density Residential

- 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

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 4 Central/South Tracy



Attachment A-1 Housing Rezone Sites Inventory Table

APN	Address	Size (Acres)	General Plan Designation (Current)	Current Zoning	Proposed Zoning	Existing Units	Total Units	Existing Use
20925050	SW of intersection of Capitol Park Dr and S Lammers Rd	10	Office	PUD	HDR	0	298	Vacant
20947002	W of intersection of W 11th St and S Lammers Rd	3.7		PUD	HDR	0	111	Vacant
20947003	W of intersection of W 11th St and S Lammers Rd	19.3	Office	PUD	HDR	0	575	Vacant
20947004	W of intersection of W 11th St and S Lammers Rd	6.7	Office	PUD	HDR	0	198	Vacant
20947005	NW of intersection of S Lammers Rd and Capitol Park Rd	2.4		PUD	HDR	0	73	Vacant
20947009	W of intersection of S Lammers Rd and Capitol Park Rd	6.1	Office	PUD	HDR	0	181	Vacant
20947010	W of intersection of S Lammers Rd and Capitol Park Rd	7.4	Office	PUD	HDR	0	220	Vacant
20947011	Intersection of S Lammers Rd and Capitol Park Rd	7	Office	PUD	HDR	0	209	Vacant
21205035	3200 Naglee Rd	4.7	Commercial	I-205	HDR	0	139	Vacant
21205036	N of intersection of W Valley Mall and Naglee Rd	2.2	Commercial	I-205	HDR	0	65	Vacant
21205037	Intersection of W Valley Mall and Naglee Rd	1.9	Commercial	I-205	HDR	0	58	Vacant
21205038	3100 N Corral Hollow Rd	1	Commercial	I-205	HDR	0	29	Vacant
21205039	W of intersection of W Valley Mall and Coral Hollow Rd	0.9	Commercial	I-205	HDR	0	28	Vacant
21205040	Southside of W Valley Mall	0.9	Commercial	I-205	HDR	0	28	Vacant
21205041	Intersection of Naglee Rd and W Valley Mall	1	Commercial	I-205	HDR	0	29	Vacant
21205042	S of intersection of Naglee Rd and W Valley Mall	2.1	Commercial	I-205	HDR	0	62	Vacant
21205052	3150 Naglee Rd	4.9	Commercial	I-205	HDR	0	146	Commercial/Retail
21227020	Intersection of Power Rd and Auto Plaza Rd	2	Commercial	PUD	HDR	0	60	Vacant
21229021	2855 W Grant Line Rd	3	Commercial	PUD	HDR	0	88	Vacant
21443001	348 W Clover Rd	0.8	Residential Medium	MDC	HDR	0	24	Residential
21443004	292 W Clover Rd	1.9	Residential Medium	MDC	HDR	0	57	Residential
21443023	188 W Clover Rd	1	Residential Medium	MDC	HDR	1	27	Residential
21443046	W of intersection of W Clover Rd and Briar Ln	0.8	Residential Medium	MDC	HDR	0	23	Vacant
21443047	N of intersection of Dovenshire Dr and Marie Ave	1.1	Residential Medium	MDC	HDR	0	31	Vacant
23202055	Intersection of Duncan Dr and Enyeart Rd	0.8	Commercial	PUD	HDR	0	23	Vacant
23213010	Intersection of W Lowell Ave and Lincoln Blvd	3.8	Public Facilities	LDR	HDR	0	113	School District Property
23510013	310 W Mt Diablo Av	0.6	Residential Medium	MDR	HDR	0	16	Residential
23510015	302 W Mt Diablo Av	1	Residential Medium	MDR	HDR	1	29	Residential
23510018	220 W Mt Diablo Av	1	Residential Medium	MDR	HDR	0	30	Residential
23510024	130 W Mt Diablo Av	1	Residential Medium	MDR	HDR	1	28	Residential
23510042	90 W Mt Diablo Av	1.5	Residential Medium	MDR	HDR	1	44	Residential
23510071	280 W Mt Diablo Av	1.3	Residential Medium	MDR	HDR	0	37	Residential
23510072	Intersection of Mt Oso Ave and Gianelli St	0.7	Residential Medium	MDR	HDR	0	21	Residential
23510073	250 W Mt Diablo Av	2	Residential Medium	MDR	HDR	1	57	Residential
23512001	205 E Third St	2.9	Residential Medium	MDR	HDR	1	86	Residential
23515002	780 E Sixth St	11.9	Downtown	M1	HDR	0	354	Vacant
23512002	207 E Third St	0.3	Residential Medium	MDR	HDR	0	9	Residential
23514009	Intersection of E 3rd St and E Mt Diablo Ave	2	Commercial	NS	HDR	0	60	Vacant
23514010	Intersection of E Mt Diablo Ave and S MacArthur Dr	1.2	Commercial	NS	HDR	0	36	Vacant
23542005	550 W Fourth St	0.3	Residential Medium	MDR	HDR	0	9	Church, Synagogue Or Temple
23542006	491 W Mt Diablo Av	0.6	Residential Medium	MDR	HDR	0	17	Church, Synagogue Or Temple
23542007	524 W Fourth St	0.5	Residential Medium	MDR	HDR	1	15	Residential
23542008	489 W Mt Diablo Av	0.9	Residential Medium	MDR	HDR	0	25	Church, Synagogue Or Temple
23542009	510 W Fourth St	0.8	Residential Medium	MDR	HDR	1	21	Residential
23542012	440 W Fourth St	0.5	Residential Medium	MDR	HDR	0	16	Vacant
23542013	E of intersection of Diablo Pl and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	15	Vacant
23543006	251 W Mt Diablo Av	0.9	Residential Medium	MDR	HDR	1	25	Residential
23543009	211 W Mt Diablo Av	0.3	Residential Medium	MDR	HDR	0	8	Residential
23543011	201 W Mt Diablo Av	0.3	Residential Medium	MDR	HDR	0	8	Residential
23543013	10009 W Mt Diablo Av	0.4	Residential Medium	MDR	HDR	0	11	Residential
23543014	W of intersection of West St and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	16	Residential
23543016	W of intersection of C St and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	14	Residential
23543017	100 W South St	0.6	Residential Medium	MDR	HDR	1	16	Residential
23543018	90 W South St	0.6	Residential Medium	MDR	HDR	1	16	Residential
23543019	70 W South St	1.1	Residential Medium	MDR	HDR	1	32	Residential
23805002	1381 Berg Av	2.6	Residential Medium	MDR	HDR	0	76	Residential
23805003	2748 W Byron Rd	1	Residential Medium	MDR	HDR	2	28	Residential
23805008	2718 W Byron Rd	1.7	Residential Medium	MDR	HDR	1	48	Residential
23805015	2600 W Byron Rd	1.1	Commercial	GHC	HDR	2	29	Residential
23805016	2590 W Byron Rd	0.5	Residential Medium	MDR	HDR	2	13	Residential

APN	Address	Size (Acres)	General Plan Designation (Current)	Current Zoning	Proposed Zoning	Existing Units	Total Units	Existing Use
23805017	2568 W Byron Rd	0.5	Residential Medium	MDR	HDR	2	13	Residential
23805022	2430 W Byron Rd	1.3	Residential Medium	MDR	HDR	0	40	Residential
23805023	1341 Berg Av	1.1	Residential Medium	MDR	HDR	1	33	Residential
23806005	1240 Berg Av	0.5	Residential Medium	MDR	HDR	1	14	Residential
23806009	1180 Berg Av	1	Residential Medium	MDR	HDR	1	29	Residential
23806013	1150 Berg Av	1.2	Residential Medium	MDR	HDR	1	36	Residential
23806018	2881 Fabian Rd	1.1	Residential Medium	MDR	HDR	3	29	Residential
23806021	1191 Berg Av	0.8	Residential Medium	MDR	HDR	2	22	Residential
23806024	1241 Berg Av	0.8	Residential Medium	MDR	HDR	1	23	Residential
23806029	1121 Berg Av	0.8	Residential Medium	MDR	HDR	1	23	Residential
23807004	3150 W Byron Rd	0.6	Residential Medium	MDR	HDR	0	18	Residential
23807005	3160 W Byron Rd	0.5	Residential Medium	MDR	HDR	1	12	Residential
23807006	3130 W Byron Rd	1.1	Residential Medium	MDR	HDR	1	31	Residential
23807007	3110 W Byron Rd	1	Residential Medium	MDR	HDR	1	29	Residential
23807008	3090 W Byron Rd	1.1	Residential Medium	MDR	HDR	1	31	Residential
23860007	3140 W Grant Line Rd	3	Commercial	PUD	HDR	0	89	Residential
24005037	Intersection of W Schulte Rd and Mabel Josephine Dr	10	Urban Reserve 7	PUD	HDR	0	298	Vacant
24014027	4720 S Lammers Rd	5	Industrial	M1-TH	HDR	1	148	Agricultural
24614001	26805 S Mac Arthur Dr	10	Residential High	M1	HDR	0	298	Residential
24865041	546 Glenbrook Dr	1	Residential Low	PUD	HDR	1	29	Residential
24865042	545 Glenbrook Dr	1	Residential Low	PUD	HDR	0	30	Residential
25105008	27901 S Lammers Rd	5	Residential Medium	MDR-TH	HDR	0	149	Agricultural
25105009	28281 S Lammers Rd	10	Residential Medium	MDR-TH	HDR	0	298	Vacant
24802017	Intersection of S Tracy Blvd and Gandy Dancer Dr	14.3	Office	M1	New MU1	0	250	Residential
24803005	4800 S Tracy Bl	14.3	Office	M1	New MU1	0	250	Residential
24803010	4100 S Tracy Bl	11.8	Office	M1	New MU1	0	206	Residential
TOTAL		239.8				38	6588	

ATTACHMENT A-2 REZONE INVENTORY TABLE (Remainder)

APN	ADDRESS	EX_ZONING	PROP_ZONING	SITE_ACRES
235-440-07	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-08	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.08
235-100-74	85 MT OSO AVE	MDR	HDR	0.19
235-100-75	65 MT OSO AVE	MDR	HDR	0.19
235-100-76	45 MT OSO AVE	MDR	HDR	0.19
235-440-06	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-04	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-05	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-100-41	91 MT OSO AVE	MDR	HDR	0.95
235-100-25	125 MT OSO AVE	MDR	HDR	0.48
235-100-23	155 MT OSO AVE	MDR	HDR	0.48
235-100-21	175 MT OSO AVE	MDR	HDR	0.48
235-100-62	215 MT OSO AVE	MDR	HDR	0.48
235-100-61	225 MT OSO AVE	MDR	HDR	0.49
235-440-03	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-02	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.10
235-440-01	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	2.08
235-100-22	150 W MT DIABLO AVE	MDR	HDR	0.49
235-100-20	170 W MT DIABLO AVE	MDR	HDR	0.49
235-100-66	370 W MT DIABLO AVE	MDR	HDR	0.73
235-210-09	19 S C ST	MDC	HDR	0.10
235-210-10	61 W MT DIABLO AVE	MDC	HDR	0.09
235-210-11	65 W MT DIABLO AVE	MDC	HDR	0.09
235-430-04	275 W MT DIABLO AVE	MDR	HDR	0.13
235-210-08	105 S C ST	MDC	HDR	0.12
235-210-07	85 S C ST	MDC	HDR	0.12
235-420-11	469 W MT DIABLO AVE	MDR	HDR	0.18
235-430-03	6 WEST ST	MDR	HDR	0.12
235-210-06	65 S C ST	MDC	HDR	0.12
235-210-05	45 S C ST	MDC	HDR	0.12
235-430-02	58 WEST ST	MDR	HDR	0.12
235-210-04	25 S C ST	MDC	HDR	0.12
235-430-35	MT DIABLO AVE BETWEEN W SOUTH ST AND C ST	MDR	HDR	0.16
235-420-10	449 W MT DIABLO AVE	MDR	HDR	0.52
235-210-03	56 W SOUTH ST	MDC	HDR	0.09
235-210-02	60 W SOUTH ST	MDC	HDR	0.08
235-210-01	66 W SOUTH ST	MDC	HDR	0.08
235-430-15	130 W SOUTH ST	MDR	HDR	0.66
235-430-12	190 W SOUTH ST	MDR	HDR	0.19
235-430-10	200 W SOUTH ST	MDR	HDR	0.25
235-430-34	212 W SOUTH ST	MDR	HDR	0.14
235-430-07	246 W SOUTH ST	MDR	HDR	0.18
235-430-05	256 W SOUTH ST	MDR	HDR	0.15
235-430-01	296 W SOUTH ST	MDR	HDR	0.16
235-420-15	375 W MT DIABLO AVE	MDR	HDR	3.12
235-420-14	416 W FOURTH ST	MDR	HDR	0.27
238-060-11	2721 FABIAN RD	MDR	HDR	0.66
238-060-12	2741 FABIAN RD	MDR	HDR	0.59
238-060-15	2831 FABIAN RD	MDR	HDR	0.66
238-060-16	2851 FABIAN RD	MDR	HDR	0.44
238-060-30	1151 BERG AVE	MDR	HDR	0.72
238-060-17	2861 FABIAN RD	MDR	HDR	0.49
238-060-10	1160 BERG AVE	MDR	HDR	1.03
238-060-19	1161 BERG AVE	MDR	HDR	0.86
238-060-20	1181 BERG AVE	MDR	HDR	0.81
238-060-08	1210 BERG AVE	MDR	HDR	0.50
238-060-07	1220 BERG AVE	MDR	HDR	0.47
238-060-06	1230 BERG AVE	MDR	HDR	0.51
238-060-22	1221 BERG AVE	MDR	HDR	0.82
238-060-23	1231 BERG AVE	MDR	HDR	0.81
238-060-04	1260 BERG AVE	MDR	HDR	0.71
238-060-03	1270 BERG AVE	MDR	HDR	0.55
238-060-25	1261 BERG AVE	MDR	HDR	0.45
238-060-26	1271 BERG AVE	MDR	HDR	0.35
238-060-27	1281 BERG AVE	MDR	HDR	0.82
238-060-02	1290 BERG AVE	MDR	HDR	1.33
238-060-28	1301 BERG AVE	MDR	HDR	0.80
238-050-12	1320 BERG AVE	MDR	HDR	0.31
238-050-11	2688 W BYRON RD	MDR	HDR	1.04
238-050-18	2550 W BYRON RD	MDR	HDR	1.06
238-050-10	2686 W BYRON RD	MDR	HDR	0.26
238-050-09	2684 W BYRON RD	MDR	HDR	0.49
238-050-07	2698 W BYRON RD	MDR	HDR	0.23
238-050-06	2710 W BYRON RD	MDR	HDR	0.85
238-050-05	2726 W BYRON RD	MDR	HDR	0.70
238-050-04	2734 W BYRON RD	MDR	HDR	0.37
238-070-09	3060 W BYRON RD	MDR	HDR	1.11
238-070-03	3190 W BYRON RD	MDR	HDR	1.30
238-070-02	3220 W BYRON RD	MDR	HDR	1.55
214-430-17	250 W CLOVER RD	MDC	HDR	0.21
214-430-16	232 W CLOVER RD	MDC	HDR	0.25
214-430-03	324 W CLOVER RD	MDC	HDR	0.83
214-430-25	172 W CLOVER RD	MDC	HDR	0.49
214-430-15	236 W CLOVER RD	MDC	HDR	0.26
214-430-08	280 W CLOVER RD	MDC	HDR	0.49
214-430-06	282 W CLOVER RD	MDC	HDR	0.51
214-430-18	202 W CLOVER RD	MDC	HDR	0.53
214-430-19	208 W CLOVER RD	MDC	HDR	0.05
214-430-02	332 W CLOVER RD	MDC	HDR	0.31
214-430-14	242 W CLOVER RD	MDC	HDR	0.20
214-430-43	246 W CLOVER RD	MDC	HDR	0.16
214-430-20	212 W CLOVER RD	MDC	HDR	0.15
214-430-21	216 W CLOVER RD	MDC	HDR	0.13
214-430-28	108 W CLOVER RD	MDC	HDR	0.42
214-430-27	134 W CLOVER RD	MDC	HDR	0.96
214-430-26	150 W CLOVER RD	MDC	HDR	0.29
214-430-24	136 W CLOVER RD	MDC	HDR	0.47
214-430-22	222 W CLOVER RD	MDC	HDR	0.10
214-430-42	W CLOVER RD AT W GABRIEL DR	MDC	HDR	0.44
214-430-07	276 W CLOVER RD	MDC	HDR	0.38
214-430-05	286 W CLOVER RD	MDC	HDR	0.42
238-060-01	1311 BERG AVE	MDR	HDR	0.82

ENVIRONMENTAL CHECKLIST

I. AESTHETICS -- WOULD THE PROJECT:

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

BACKGROUND AND IMPACTS FINDING INCLUDED IN THE TRACY GENERAL PLAN EIR:

As described in the Tracy General Plan EIR there would be three significant unavoidable visual quality impacts under the General Plan for the Tracy Planning Area and under cumulative conditions in the region as a whole. Despite General Plan policies to preserve open space and agricultural lands, scenic resources and community character, policies in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and the City's Agricultural Mitigation Fee Ordinance, development occurring within the city and its SOI Sphere of Influence would result in a change in visual character from an agricultural appearance to a more urban appearance and a deterioration of views from scenic roadways.

RESPONSES TO CHECKLIST QUESTIONS

a): Less than Significant. The proposed Project does not directly propose or approve any development within the city. Future projects associated with the rezone program and buildout of the General Plan's Land Use Map would include urban type land uses within the city limits that are generally consistent with developed urban land use types and designations included throughout the city and planning area.

A scenic vista is described as a clear, expansive public view of significant regional features possessing visual and aesthetic qualities of value to the community. The City's General Plan EIR lists the City's scenic resources and vistas that are considered to be local assets, noting public views of the expansive agricultural lands within the City's SOI, and views of the Diablo Mountain

Range. Additionally, portions of the city and SOI may be visible from Interstate 580 (between Interstate 205 and Interstate 5), which is an Officially Designated State Scenic Highway.

Implementation of the proposed Project rezones, consistent with the General Plan's Housing Element's rezone program, would ultimately provide for future residential development in an area of the City that is adjacent to and within developed areas and areas already planned for urban uses. Individual future projects would require site specific reviews associated with their development applications and site plans. Development Review is a discretionary type of review of the design of a project, including the site plan, landscape plan, building elevations, grading plan, and utility plan. The purpose of Development Review is to ensure that a project is compatible with the surrounding environment and consistent with the City's goals and policies. New buildings (commercial, industrial, and residential of three units or greater) and substantial modifications to the exterior of existing buildings require Development Review.

None of the rezone sites are designated as a scenic vista, and all are located within the city limits in areas that are currently designated for urban type uses. As described previously, the General Plan EIR identified significant impacts related to development occurring within the city and its SOI Sphere of Influence that would result in a change in visual character from an agricultural appearance to a more urban appearance and a deterioration of views from scenic roadways.

The project including project rezones would not significantly alter the visual environment, and would be consistent with previous findings. Therefore, this impact is considered **less than significant**.

Response b): Less than Significant. As described in the Tracy General Plan EIR, there are two Officially Dedicated California Scenic Highway segments near the Tracy Planning Area. The first designated scenic highway is the portion of I-580 between I-205 and I-5, which offers views of the Coast Range to the west and the Central Valley's urban and agricultural lands to the east. The second scenic highway is the portion of I-5 that starts at I-205 and continues south to Stanislaus County, which allows for views of the surrounding agricultural lands and the Delta-Mendota Canal and California Aqueduct. As described previously, the General Plan EIR identified significant impacts related to development occurring within the city and its SOI Sphere of Influence that would result in a change in visual character from an agricultural appearance to a more urban appearance and a deterioration of views from scenic roadways. There is no development directly proposed or approved by the Project. The Project rezones include site rezones consistent with the Housing Element to meet region housing goals and are included in areas that have been designated for urban site uses. As such, would not significantly alter the visual environment and any future development proposed for the site would be required to be reviewed for project specific impacts. Therefore, there is a **less-than-significant impact**.

Response c): Less than Significant. The proposed Project does not directly propose or approve any development within the city. Additionally, the site rezones are not located in a non-urbanized area, and all sites are within the city limits. The Project would not conflict with any zoning requirements that impact scenic resources or viewsheds. Impacts associated with site rezoning for General Plan Housing Element consistency would be consistent with the General Plan EIR. As

such, no new impacts or impacts above what was previously analyzed would occur. Therefore, this is considered a **less-than-significant impact**.

Response d): Less than Significant. Daytime glare can occur when the sunlight strikes reflective surfaces such as windows, vehicle windshields and shiny reflective building materials. The proposed Project would rezone the Housing Element sites but does not propose and would not approve new residential structures or lighting.

Development Review of the design of a project, including the site plan, landscape plan, building elevations, grading plan, and utility plan would be required for any site specific applications. The purpose of Development Review is to ensure that a project is compatible with the surrounding environment and consistent with the City's goals and policies. New buildings (commercial, industrial, and residential of three units or greater) and substantial modifications to the exterior of existing buildings require Development Review.

Any future development proposed would be subject to City requirements such as City of Tracy street light standards, and requirements for light illumination. Exterior lighting on new projects is also regulated by the Tracy Municipal Code, Article 30. – (Development Review) specifies that the site plan and architectural review package includes an exterior lighting review. The City addresses light and glare issues on a case-by-case basis during project approval and typically adds requirements as a condition of project approval to shield and protect against light spillover from one property to the next. The implementation of City standards and requirements on future projects would reduce any impacts related to light and glare to a less-than-significant level. As such, no new impacts or impacts above what was previously analyzed in the General Plan EIR would occur. As such, impacts are considered **less than significant**.

II. AGRICULTURE AND FOREST RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?			X	
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X	

BACKGROUND AND PREVIOUS ENVIRONMENTAL FINDINGS INCLUDE IN THE TRACY GENERAL PLAN EIR.

Four significant and unavoidable impacts to agricultural resources were identified in the General Plan EIR. As described in the General Plan EIR, development under the General Plan would result in conversion of Prime and Unique Farmland, and Farmland of Statewide importance to urban uses. Buildout of the General Plan may also result in conversion of land under active Williamson Act contracts to urban uses. The General Plan could also result in the development of incompatible urban uses adjacent to agricultural uses, which could result in the conversion of these lands from farmland. Finally, there would be a cumulative significant unavoidable impact associated with the General Plan, which would contribute to the on-going loss of agricultural lands in the region as a whole. The permanent loss of farmland was considered, in each of these cases, to be a significant and unavoidable impact in the General Plan EIR.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. As shown below in Table AG-1, Housing Element sites included within the Tracy Housing Element include many sites that are on existing agricultural land including: 64.94 acres of Farmland of Local Importance, 69.91 acres of Prime agricultural lands, and 0.17 acres of Unique farmland.

Table AG-1:

Type of Farmland	Acres included in Rezone Areas Inventory
Farmland of Local Importance	64.94
Prime Farmland	69.91
Unique Farmland	0.17

Source: De Novo Planning Group, 2024; Department of Conservation Farmland Mapping and Monitoring Program (FMMP) 2018 Important Farmland data file, San Joaquin County Assessor Parcel file.

The proposed Project would include site rezones to accommodate regional housing goals on sites that are currently identified for urban land uses in the Tracy General Plan. All site rezones are included within the city limits on parcels that have been identified for urban development by the Tracy General Plan and none are zoned for agricultural uses. As such, the loss of local agricultural lands was taken into account in the General Plan EIR which analyzed citywide buildout of the General Plan Land Use Map. The Project is consistent with the General Plan findings. As such, implementation of the proposed Project would have a **less-than-significant impact** related to this environmental topic.

Response b): Less than Significant. The proposed Project does not include land use changes or other features that would impact parcels under a Williamson Act contract. No rezone or other housing element sites are under a Williamson act contract, and none are designated or zoned for agricultural uses. Therefore, implementation of the proposed Project would not conflict with a Williamson Act Contract, and would not conflict with any agricultural zoning. As such, this is considered a **less-than-significant impact**.

Responses c) and d): No Impact. The project area is not located in an area where there are forest resources. There are no forest resources on or in the immediate vicinity of the Project area. Therefore, there is **no impact**.

Response e): Less than Significant. No forest resources are located within the city of Tracy. As described under Responses (a) and (b) above, the Project rezone sites are not currently designated or zoned for agricultural uses.

The proposed Project would include site rezones to accommodate regional housing goals on sites that are currently identified for urban land uses in the Tracy General Plan, and as such, the loss of local agricultural lands was taken into account in the General Plan EIR.

As described in the Tracy General Plan Draft EIR, Impact AG-2, the General Plan contains several policies to minimize impacts to agricultural resources due to the conversion of additional farmland to urban uses. However, implementation of the General Plan was found to have a significant and unavoidable impact to these resources. The proposed Project is consistent with the developed land use types and development footprint impacts described in the General Plan EIR and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact would be considered **less than significant**.

III. AIR QUALITY -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	X			
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	X			
c) Expose sensitive receptors to substantial pollutant concentrations?	X			
d) Create objectionable odors affecting a substantial number of people?	X			

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDE IN THE TRACY GENERAL PLAN EIR.

As described in the Tracy General Plan EIR, there would be two significant and unavoidable air quality impacts as a result of implementation of the General Plan. The Draft EIR found that the General Plan would be inconsistent with applicable air quality plans of the San Joaquin Valley Air Pollution Control District (SJVAPCD), since it results in a higher level of vehicle miles traveled than accounted for in the District's clean air planning efforts. The General Plan and Sustainability Action Plan would also contribute cumulatively to on-going air quality issues in the San Joaquin Valley, to an extent that cannot be mitigated by policies and programs to reduce pollutant emissions.

BACKGROUND

Tracy is located within the SJVAPCD. This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

The SJVAPCD has primary responsibility for compliance with both the federal and state standards and for ensuring that air quality conditions are maintained. They do this through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues.

Activities of the SJVAPCD include the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution (i.e., Authority to Construct and Permit to Operate), inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the Federal Clean Air Act and California Clean Air Act.

RESPONSES TO CHECKLIST QUESTIONS

Responses a-d): Potentially Significant. Based on the current air quality conditions in the SJVAB, as well as the additional development potential under the rezone program, it has been determined that the potential impacts on air quality caused by the proposed Project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed Project has the potential to have a significant impact on air quality. At this point, a definitive impact conclusion for each of these environmental topics will not be made. Rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR. The EIR will include an air quality analysis that presents the methodology, thresholds of significance, a program-level impact analysis, a cumulative impact analysis, and a discussion of feasible mitigation to reduce any potential impacts on air quality.

IV. BIOLOGICAL RESOURCES -- WOULD THE PROJECT:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDE IN THE TRACY GENERAL PLAN EIR.

As described in the Tracy General Plan EIR, impacts to biological resources were found to be less than significant. The General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), found that implementation of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) for development projects provides adequate mitigation to reduce impacts to biological resources to a level acceptable to meet State and Federal requirements.

RESPONSES TO CHECKLIST QUESTIONS

Response a, b, d): Less than Significant. Special status species occur within the San Joaquin County region and within the city. The Project does not propose and would not approve any development projects that would directly disturb or impact any essential habitat, wildlife corridors, or special status species. Future development projects associated with Housing

Element sites and General Plan buildout would include development on urban uses on currently vacant sites. As described in the existing General Plan Draft EIR development associated with implementation of the General Plan would contribute to the ongoing loss of natural and agricultural lands in the Tracy area, which currently provide habitat for a variety of species. The General Plan includes a variety of policies that support species throughout the planning area. Goal OSC-1 of the General Plan states the general intention to protect rare, endangered and threatened plant and animal species. Objective OSC-1.1, Policy P2 of the General Plan specifically outlines the City's intent to continue its participation, along with SJCOG and other local municipalities, to implement and enforce the SJMSCP. Thereby, the City would continue to facilitate adoption and compliance with the Plan by project applicants, and the collection of appropriate mitigation fees to compensate for any loss of sensitive species habitat from new development.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), implementation of the SJMSCP for development projects provides adequate mitigation to reduce impacts to biological resources to a level acceptable to meet State and federal requirements. Project proponents would also be required to comply with existing local, State and federal regulations, as described in the Existing Setting of the General Plan Draft EIR.

The proposed Project is consistent with urban and developed land uses and development footprints described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact is considered **less than significant**.

Response c): Less than Significant. A wetland is an area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are defined by regulatory agencies as having special vegetation, soil, and hydrology characteristics. Hydrology, or water inundation, is a catalyst for the formation of wetlands. Frequent inundation and low oxygen causes chemical changes to the soil properties resulting in what is known as hydric soils. The prevalent vegetation in wetland communities consists of hydrophytic plants, which are adapted to areas that are frequently inundated with water. Hydrophytic plant species have the ability to grow, effectively compete, reproduce, and persist in low oxygen soil conditions.

Below is a list of wetlands that are found in the Tracy planning area:

- **Farmed Wetlands:** This category of wetlands includes areas that are currently in agricultural uses. This type of area occurs in the northern portion of the Tracy Planning Area.
- **Lakes, Ponds and Open Water:** This category of wetlands includes both natural and human-made water bodies such as that associated with working landscapes, municipal water facilities and canals, creeks and rivers.

- **Seasonal Wetlands:** This category of wetlands includes areas that typically fill with water during the wet winter months and then drain enough to become ideal plant habitats throughout the spring and summer. There are numerous seasonal wetlands throughout the Tracy Planning Area.
- **Tidal Salt Ponds and Brackish Marsh:** This category of wetlands includes areas affected by irregular tidal flooding with generally poor drainage and standing water. There are minimal occurrences along some of the larger river channels in the northern portion of the Tracy Planning Area.

The Project's program level rezones do not propose and would not approve any development that would directly disturb sites. As future developments are proposed they would be developed under a land use category (consistent with the General Plan), and would be required to be analyzed for site specific impacts consistent with their project descriptions and site plans. No development is proposed or would be approved at this time. The proposed Project is consistent with urban and developed type land uses, and the overall development footprints described in the General Plan and as such, would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact is considered **less than significant**.

Responses e), f): Less than Significant. The City of Tracy is located within the jurisdiction of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and is located within the Central/Southwest Transition Zone of the SJMSCP. The San Joaquin Council of Governments (SJCOG) prepared the SJMSCP pursuant to a Memorandum of Understanding adopted by SJCOG, San Joaquin County, the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Game (CDFG), Caltrans, and the cities of Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy in October 1994. On February 27, 2001, the SJMSCP was unanimously adopted in its entirety by SJCOG. The City of Tracy adopted the SJMSCP on November 6, 2001.

According to Chapter 1 of the SJMSCP, its key purpose is to “provide a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses, while protecting the region's agricultural economy; preserving landowner property rights; providing for the long-term management of plant, fish and wildlife species, especially those that are currently listed, or may be listed in the future, under the Federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); providing and maintaining multiple use Open Spaces which contribute to the quality of life of the residents of San Joaquin County; and, accommodating a growing population while minimizing costs to project proponents and society at large.”

In addition to providing compensation for conversion of open space to non-open space uses, which affect plant and animal species covered by the SJMSCP, the SJMSCP also provides some compensation to offset impacts of open space conversions on non-wildlife related resources such as recreation, agriculture, scenic values and other beneficial open space uses. Specifically, the SJMSCP compensates for conversions of open space to urban development and the expansion of

existing urban boundaries, among other activities, for public and private activities throughout the County and within Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, and Tracy.

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 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.

As future developments are proposed they would be required to consistent with the General Plan and zoning code, requirements, and would be required to be analyzed for site specific impacts consistent with their intended use, project descriptions and site plans. Future projects would be required to be reviewed for consistency with the requirements identified in the SJMSCP. Participation in the SJMSCP satisfies requirements of both the state and federal endangered species acts, and ensures that the impacts are mitigated below a level of significance in compliance with the California Environmental Quality Act (CEQA). The proposed Project is consistent with the types of development and development footprints assumed within the city limits of Tracy, and urban and developed land uses described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact is considered **less than significant**.

V. CULTURAL RESOURCES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), impacts to cultural resources were found to be less than significant with mitigation. The General Plan EIR included the following measures that reduce these impacts to a less-than-significant level:

- Mitigation Measure CUL-1a: The City shall include a policy under Objective CC-3.1 (Policy P4) to require, as part of the development review process, 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.
- Mitigation Measure CUL-1b: The City shall include a policy under Objective CC-3.1 (Policy P5) to require that any archaeological or paleontological resources on private property be either preserved on their sites or adequately documented and conserved as a condition of removal. The policy shall further require that if any resources are found unexpectedly during development, then construction must cease immediately until accurate study and conservation measures are implemented.
- Mitigation Measure CUL-1c: The City shall include a policy under Objective CC-3.1 (Policy P6) requiring that 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.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b), c): Less than Significant. Although much of the new development permitted under the General Plan would occur on land without existing structures, the City's commitment to infill development could result in the redevelopment of areas containing historic resources. Alteration, disturbance or demolition of historic buildings and landmarks might result in a potentially significant impact on historical resources in Tracy. To protect these resources, the City currently relies on the Tracy Municipal Code, which specifies that renovations and construction must not impede the continued listing of structures currently listed on the National

Register of Historic Structures. The General Plan contains additional policies to provide more comprehensive protection for historic resources in the area. Overall, the City of Tracy is committed to preserving and enhancing the historic resources in the Tracy area as possible (General Plan Goal CC-3). This goal contains a series of policies directed at preserving and protecting Tracy's historic resources, especially identified historic buildings and landmarks (Objective CC 3.1, Policies P1 through P3). Objective CC-3.1, Policy P1 encourages the preservation and enhancement and conservation of historic and older neighborhoods, such as Lincoln Park. Incompatible development adjacent or in close proximity can also detract from historic resources. Objective CC-3.1, Policy P2 states that identified cultural and historical landmarks and buildings shall be preserved. Objective CC-3.1, Policy P3 states that new development, redevelopment, alterations and remodeling projects should be sensitive to the surrounding historical context. Finally, to ensure that as-of-yet identified historic resources are preserved, Objective CC-3.1, Action 1 directs the City to update, expand and maintain inventories of the City's historic resources, using criteria and methods that are consistent with State and federal guidelines. This is especially important in Tracy's historic downtown, where its numerous historical buildings enhance Tracy's identity. The combination of these policies and guiding mechanisms, in part by implementation of the General Plan, would reduce potential impacts to historical resources to a less-than-significant level.

The Tracy Planning Area likely contains undiscovered archaeological and paleontological sites, including human remains, especially in undeveloped areas. Development that includes ground disturbance actions could result in a potentially significant impact to paleontological and archaeological resources. The General Plan currently references these under the general category of cultural resources and states the objective to identify and preserve cultural and historic resources (Objective CC-3.1). General Plan Objective CC 3.1 Policy P4 includes as part of the development review process, 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.

As with most projects in California that involve ground-disturbing activities, there is the potential for discovery of a previously unknown cultural and historical resource or human remains. As future developments are proposed they would be developed under a residential use category (consistent with the General Plans development footprint), and would be required to be analyzed for site specific impacts consistent with their project descriptions and site plans. Future projects would be required to be reviewed for site specific impacts and would be required to comply with the mitigation requirements listed above.

No development is proposed or would be approved at this time. The proposed Project is consistent with the development footprint and urban type land uses described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact is considered **less than significant**.

VI. ENERGY -- WOULD THE PROJECT:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), energy-related impacts were found to be less than significant.

*RESPONSES TO CHECKLIST QUESTIONS***Responses a), b): Less than Significant.**

Appendix F of the CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

As most recently amended by SB 100 (2018), California's Renewables Portfolio Standard requires retail sellers of electric services and local publicly-owned electric utilities to increase procurement from eligible renewable energy resources to 50 percent of total retail sales by 2026, and 60 percent of total retail sales by 2030. SB 100 also established a State policy goal to achieve 100 percent renewables by 2045.

The Tracy General Plans' Open Space and Conservation Element contains the goal to promote the efficient use of energy resources in the City (Goal OSC-5). This goal contains a series of policies and actions to ensure that development is designed for maximum energy efficiency and to reduce the use of energy through the City's direct actions. Under the General Plan, new development should include solar orientation, the use of materials and mechanical systems that reduce energy consumption and the use of alternative energy sources. The Circulation Element contains policies to promote the use of alternative transportation including walking, biking and transit use in order to reduce driving and thus energy use. Additionally, the Land Use and Community Character

Elements calls for an urban form that encourages walking and biking. These policies would encourage people to walk, bike and take transit. Given these policies and actions, the General Plan would not result in the wasteful, inefficient and unnecessary consumption of energy.

The proposed Project does not include or propose any construction that would directly lead to energy consumption at the program level, however the increased development capacity under the rezone program could increase residential development capacities for HDR uses. However, the proposed Project would be required to be consistent with all General Plan policies related to energy as briefly described above, and would be consistent with impacts previously identified by the General Plan EIR. As such, this impact is considered **less than significant**.

VII. GEOLOGY AND SOILS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), there are no significant impacts to geology, soils and seismic hazards.

RESPONSES TO CHECKLIST QUESTIONS

Responses a.i), a.ii): Less than Significant. The City of Tracy is located in an area of moderate to high seismicity. However, the city is not located within an Alquist-Priolo Earthquake Fault Zone

or other special study area. However, relatively large earthquakes have historically occurred in the Bay Area and along the margins of the Central Valley. Many earthquakes of low magnitude occur every year in California. The two nearest earthquake faults zoned as active by the State of California Geological Survey are the Great Valley Fault, located approximately 5 miles to the west of the site, and the Greenville fault, located approximately 13 miles southwest of the city. The Great Valley fault is a blind thrust fault with no known surface expression; the postulated fault location has been based on historical regional seismic activity and isolated subsurface information.

Portions of the Great Valley fault are considered seismically active thrust faults; however, since the Great Valley fault segments are not known to extend to the ground surface, the State of California has not defined Earthquake Fault Hazard Zones around the postulated traces. The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults. Further seismic activity can be expected to continue along the western margin of the Central Valley, and as with all projects in the area, the project will be designed to accommodate strong earthquake ground shaking, in compliance with the applicable California building code standards.

Other active faults capable of producing significant ground shaking at the site include the Midway fault located approximately 6 miles west of the city and the San Joaquin fault located 5 miles south of the city. Any one of these faults could generate an earthquake capable of causing strong ground shaking. Earthquakes of Moment Magnitude (Mw) 7 and larger have historically occurred in the region and numerous small magnitude earthquakes occur every year.

Since there are no known active faults crossing the project area and the site is not located within an Earthquake Fault Special Study Zone, the potential for ground rupture at the site is considered low.

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region and along the margins of the central valley could cause considerable ground shaking, similar to that which has occurred in the past. In order to minimize potential damage, all construction within the city would be required to comply with the latest California Building Code standards, as required by the City of Tracy Municipal Code 9.04.030.

Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage.

Building new structures for human use would increase the number of people exposed to local and regional seismic hazards. Seismic hazards are a significant risk for most property in California.

The Safety Element of the Tracy General Plan includes several goals, objectives and policies to reduce the risks to the community from earthquakes and other geologic hazards. In particular, the following policies would apply to the Project:

SA-1.1, Policy P1: Underground utilities, particularly water and natural gas mains, shall be designed to withstand seismic forces.

SA-1.1, Policy P2: Geotechnical reports shall be required for development in areas where potentially serious geologic risks exist. These reports should address the degree of hazard, design parameters for the project based on the hazard, and appropriate mitigation measures.

SA-1.2, Policy P1: All construction in Tracy shall conform to the California Building Code and the Tracy Municipal Code including provisions addressing unreinforced masonry buildings.

The City reviews all development projects for consistency with the General Plan policies and California Building Code provisions identified above. This review occurs throughout the project application review and processing stage, and throughout plan check and building inspection phases prior to the issuance of a certificate of occupancy.

The proposed Project is consistent with the urban and developed type land uses described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. Any future developed uses would be subject to consistency with the requirements of the California Building Code and the Tracy General Plan policies identified above would ensure that impacts on humans associated with seismic hazards would be **less than significant**.

Responses a.iii): Less than Significant. Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, some silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present. Soils that underlay the planning area consist of predominantly clay soil particle sizes. Clay-type soils are generally not subject to liquefaction.

As identified in the Tracy General Plan EIR, the majority of the Tracy Planning Area is at low risk for liquefaction, with the exception for the river banks within the Planning Area. Objective SA-1.1 states that geologic hazards should be minimized. The Safety Element contains a policy requiring that geotechnical engineering studies be undertaken for any development in areas where potentially serious geologic risks exist (Objective SA- 1.1, Policy P1), which would include liquefaction. The General Plan EIR concluded that the implementation of this policy would reduce the potential risk of liquefaction to a less-than-significant level.

During the development review process and prior to development, the City of Tracy requires a geotechnical investigation to identify onsite soil conditions and identify any site-specific engineering measures to be implemented during the construction of building foundations and subsurface utilities. The proposed Project is consistent with the land uses types and development areas described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact is **less than significant**.

Responses a.iv): Less than Significant. The proposed Project is consistent with urban type land uses described in the General Plan and would be consistent with impacts previously identified. no development t is proposed or would be approved on steep slopes or in areas subject to landslides. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Response b): Less than Significant. Risks associated with erosive surface soils can be reduced by using appropriate controls during construction and properly re-vegetating exposed areas. As described in the Air Quality section, development projects require the implementation of various dust control measures during site preparation and construction activities that would reduce the potential for soil erosion and the loss of topsoil. Additionally, projects that create ground disturbance would require the implementation of various best management practices (BMPs) and a SWPPP that would reduce the potential for disturbed soils and ground surfaces to result in erosion and sediment discharge into adjacent surface waters during construction activities. The proposed Project included the rezone program would not approve, and does not proposed any specific development project that would directly disturb soils. Future projects would be required to comply with standards and practices mentioned above and would be reviewed for site/project specific impacts through the development review process. The proposed Project is consistent with urban and developed type land uses described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Responses c), d): Less than Significant. The potential for the project to be exposed to unstable soil conditions resulting from on-or off-site landslide, and liquefaction are discussed above under Responses a.iii, and a.iv., and were found to be less-than-significant impacts. The proposed Project is consistent with urban type land uses described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Lateral Spreading: The geologic conditions conducive to lateral spreading include gentle surface slope (0.3-5% slope), and liquefiable soils. As identified in the Tracy General Plan EIR, the majority of the Tracy Planning Area is at low risk for liquefaction, with the exception for the river banks within the Planning Area. Soils that underlay the planning area consist of predominantly clay soil particle sizes, which are generally not subject to liquefaction.

The potential for ground surface damage at the site resulting in lateral spreading is low due to lack of saturated liquefiable soils. The proposed Project is consistent with urban type land uses

described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Expansive Soils: Expansive Soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion, and settling can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials will be subjected to volume changes during seasonal fluctuations in moisture content. As indicated in the Tracy General Plan EIR, Tracy does have a moderate to high risk for expansive soils, depending on the location and soil type. The Safety Element contains objectives to minimize geologic hazards, and a policy to require geotechnical reports for all development proposed in areas with risk of geological hazard (Objective SA-1.1, Policy P2). Additionally, the California Building Code Title 24, Part 2, Chapter 18, Section 1803.1.1.2 requires specific geotechnical evaluation when a preliminary geotechnical evaluation determines that expansive or other special soil conditions are present, which, if not corrected, would lead to structural defects. The proposed Project is consistent with urban type land uses described in the General Plan and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this is a **less-than-significant impact**.

Response e): No Impact. The project includes minor policy amendments and the rezone the sites for residential type site uses to meet the City's RHNA. All rezone sites are located within the city limits in areas served by utility services. The Project does not propose, and does not require an alternative wastewater system such as septic tanks. Implementation of the proposed Project would have **no impact** relative to this environmental issue.

Response f): Less than Significant. There are several rock formations in the Tracy area that could be indicators of potential paleontological resources. These include the Neroly Formation, Moreno Shale deposits, and Panoche Formations. However, these rock formations do not constitute a unique geologic feature.

According to the University of California Museum of Paleontology (UCMP) Collections, many 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 area have been vertebrate in nature. The Tracy General Plan includes policies specifically related to the protection of paleontological resources under Objective CC 3.1. Superficially Policies 4 and 5 state that 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. Additionally, 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.

The Project includes minor policy amendments and the rezone the sites for residential type site uses to accommodate the City's RHNA, and does not propose and site uses that would directly include ground disturbing activities or would impact paleontological resource or unique geologic features. Future individual projects would be required to include site specific reviews, and would be consistent with General Plan Objective CC 3.1 as described above. Additionally, all rezone sites are included within areas of the city that have been identified for urban uses. No other land use changes are proposed and, thus the Project would be consistent with previous findings as they relate to development footprint impacts included within the Tracy General Plan EIR. As such, this is a less-than-significant impact.

VIII. GREENHOUSE GAS EMISSIONS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	X			

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), the General Plan is also expected to lead to one significant and unavoidable greenhouse gas (GHG) emission impact. The General Plan would result in substantial GHG emission increases, conflicting with State efforts to reduce GHG emissions and meet AB 32 targets by 2020. Although the General Plan and Sustainability Action Plan incorporate policies and measures to reduce GHG emissions, reductions would not be sufficient to avoid a significant impact. On February 1, 2011 the Tracy City Council adopted a Statement of Overriding Considerations (Resolution 2011-028) for the significant generation of GHG emissions resulting from adoption of the General Plan.

BACKGROUND DISCUSSION

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 (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). 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 CO₂, CH₄, and N₂O 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 (IPCC, 2023).

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), 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 (California Energy Commission, 2023).

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 (MMTCO₂e) in 2022 (California Air Resources Board, 2023).

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2022, accounting for 38% of total GHG emissions in the State. This category was followed by the industrial sector (23%), the electricity generation sector (including both in-state and out of-state sources) (16%), the agriculture and forestry sector (9%), the residential energy consumption sector (8%), and the commercial energy consumption sector (6%) (California Air Resources Board, 2023).

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 (National Resources Defense Council, 2014). 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 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 (California Environmental Protection Agency, 2010). 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. According to the Indicators of Climate Change in California report (OEHHA, 2022), the impacts of global warming in California are anticipated to include, but are not limited to, the following:

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 snow pack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snow pack, 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 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, snow pack losses are expected to be only half as large as those expected if temperatures were to rise to the higher warming range. How much snow pack 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 snow pack 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.

RESPONSES TO CHECKLIST QUESTIONS

Response a), b): Potentially Significant. Implementation of the proposed Project could generate greenhouse gases (GHGs) from a variety of sources, including but not limited to vehicle trips, electricity consumption, water use, and solid waste generation. It has been determined that the potential impacts from GHG emissions by the proposed Project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed Project has the potential to have a significant impact from GHG emissions. At this point, a definitive impact conclusion for each of these environmental topics will not be made. Rather, all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include a GHG emissions analysis pursuant to the requirements of the California Governor’s Executive Order S-3-05 and The Global Warming Solutions Act of 2006 (AB 32), Senate Bill 375 (SB 375), and Senate Bill 32 (SB 32). These analyses will consider a regional approach toward determining whether GHG emissions are significant, and will present policies and actions included within the updated General Plan to minimize impacts. The discussion and analysis will include an assessment of the VMT growth compared with population statistics in addition to analyzing the General Plan’s goals, policies, and actions for consistency with Statewide GHG goals including but not limited to AB 32, SB-32 and relevant Executive Orders.

IX. HAZARDS AND HAZARDOUS MATERIALS -- WOULD THE PROJECT:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), there are no significant impacts to hazardous materials and other hazards.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. The proposed Project includes the rezoning to sites for HDR uses to meeting the City's RHNA and, minor text amendments to the General Plan and zoning code. No development is proposed or would be approved at this time however, due to the rezone program additional capacity for residential development would be assumed on rezone sites.

As described Under General Plan Objective SA-4.1 Policy P3. which promotes the safe transport of hazardous materials through Tracy and shall be promoted by implementing the following measures:

- Maintain formally-designated hazardous material carrier routes to direct hazardous materials away from populated and other sensitive areas.
- Prohibit the parking of vehicles transporting hazardous materials on City streets.
- Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other immobile populations to the extent possible.

Residential land uses do not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common residential grade hazardous materials such as household cleaners, paint, etc. Future residential site uses would not pose a significant hazard to the public or the environment. No specific development is proposed, or would be approved by the proposed Project rezone. The rezone is consistent with the developed types assumed within the Tracy city limits and any future development proposes would require site specific reviews based on the project description and site plan.

As development projects are proposed and approved in the future, transportation, storage, use, and disposal of hazardous materials during construction activities associated with future development applications would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, as described previously future development projects would be required to implement a Stormwater Pollution Prevention Plan and BMPs during construction activities, which would prevent any contaminated dust or runoff from leaving project sites. The proposed Project is consistent with urban and developed type land uses described in the General Plan and assumed within the city limits, and would be consistent with impacts previously identified. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Response c): Less than Significant. As described under Response a), above, the Project would not be anticipated to involve the use, storage, transport or handling of hazardous materials. Future development applications consistent with the proposed rezone program would not be anticipated to involve the use, storage, transport or handling of hazardous material beyond those commonly found in typical residential areas. The residential uses proposed would not expose school children to substantial pollutant concentrations, hazardous materials, or other significant hazards. Construction related activities associated with future development applications may utilize limited quantities of common hazardous materials on the site, and the use, storage, and transport of these materials are required to comply with applicable federal, state, and local statutes and regulations, which would reduce the potential for accidental spills or releases that could expose schools to hazardous materials. General Plan Objective SA-4.1 is to minimize exposure to harmful hazardous materials and waste by Tracy residents. Objective SA-4.1, Policy P1 ensures adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences and public facilities.

The proposed Project is consistent with the urban development types and uses assumed within the city limits and described in the General Plan and would be consistent with impacts previously

identified. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Response d): Less than Significant. As stated in the City's General Plan and General Plan EIR, developers are required to conduct the necessary level of environmental investigation prior to project approval to ensure that development sites would not affect the environment or the health or safety of future property owners (Objective SA-4.1, Policy P2). The General Plan EIR concluded that this policy would reduce the potential impact to a less-than-significant level. Specifically Policy P2. states that "When reviewing applications for new development and redevelopment in areas historically used for commercial or industrial uses, developers shall conduct the necessary level of environmental investigation to ensure that soils, groundwater and buildings affected by hazardous material releases from prior land uses and lead or asbestos potentially present in building materials, will not have a negative impact on the natural environment or health and safety of future property owners or users.

The testing of soil prior and records reviews prior to the start of construction in order to identify whether soil in the area has been impacted by historic operations is required prior to any future development application, construction or earthmoving activities, as required by the Tracy General Plan. The Project would be required to be consistent with the Tracy General Plan and soil testing requirements and would be consistent with previous finding as all sites are located within the city on parcels that have been identified for urban site uses. Therefore, implementation of the proposed Project would result in a **less-than-significant impact** relative to this environmental topic.

Responses e): Less than Significant. The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. The Tracy Municipal Airport is a general aviation airport owned by the City and managed by the Public Works Department. Guidelines for Airport Land Use were developed by SJCOG Airport Land Use Commission in 2013. Furthermore, the City of Tracy adopted an Airport Master Plan in 1998, analyzing the impacts to safety on surrounding development from the Tracy Municipal Airport.

As stated in Section 1.3.1 of the ALUCP; Actions Which Require ALUC Review: As required by state law, the follow in types of actions shall be referred to the ALUC prior to their approval by the local jurisdiction:

- (a) The adoption or approval of any amendment to a general or specific plan affecting the property within an airport influence area (PUC Section 21676(b))
- (b) The adoption or approval of a zoning ordinance or building regulation which (1) affects property within an airport influence area, and (2) involves the types of airport impact concerns listed in Section 1.4 (PUC Section 21676(b))

The Tract General Plan includes Objective SA-5.1 to ensure that land uses within the vicinity of the Tracy Municipal Airport are compatible with airport restrictions and operations.

Specifically, Objective SA-5.1, Policy P1. Ensures that new development shall be consistent with setbacks, height and land use restrictions as determined by the Federal Aviation Administration and the San Joaquin County Airport Land Use Commission, as well as the policies of the City's Airport Master Plan.

As such, project review by the ALUC would be required for future development project and would be required to be compatible with airport restrictions and operation requirements. Future development projects located within any identified safety zones would require review for site specific impacts related to their relative site plans and development applications. As such this is considered a **less-than-significant impact**.

Response f): Less than Significant. The General Plan includes policies that require the City to maintain emergency access routes that are free of traffic impediments (Objective SA-6.1, Policy P1 and Action A2). The proposed Project does not propose or approve any development projects and does not include any actions that would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. All future development projects would be reviewed for site specific impacts. This review would include a review for consistency with Objective SA-6.1, Policy P1 and Action A2.

The Project involves minor updates to the General Plan and Zoning Code text, as well as the rezoning of sites identified by the Housing Element's rezoning program to meet the City's RHNA. No specific development is proposed or would be approved. Any future application for the development of residential uses within the city limits would be in areas currently designated by the General Plan and Zoning Map for additional urban and developed site uses, and would not interfere with any emergency response or evacuation plans. Implementation of the proposed Project would result in a **less-than-significant impact** relative to this environmental topic.

Response g): Less than Significant. The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

Since the project rezone areas and lands within the city limits are not located within a designated wildfire hazard area, this impact is considered **less than significant**.

X. HYDROLOGY AND WATER QUALITY -- WOULD THE PROJECT:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), there are no significant impacts to hydrology and flooding. However, the EIR does describe that development under the General Plan has the potential to cause significant impacts by increasing stormwater runoff associated with construction activities and increasing impermeable surfaces, thereby placing greater demands on the stormwater handling system.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed Project including the rezone program does not include any development proposals that would directly require wastewater services or

treatment. However, future development applications and projects throughout the city would require wastewater services to be conveyed to the Tracy Wastewater Treatment Plant (WWTP) for treatment and disposal. The City's wastewater collection system consists of gravity sewer lines, pump stations and the WWTP. Wastewater flows toward the northern part of the City where it is treated at the WWTP and then discharged into the Old River in the southern Sacramento-San Joaquin Delta. The Project's potential to violate a water quality standard or waste discharge requirement is related to the treatment of wastewater generated, and the quality of stormwater runoff generated.

In 2008, the City expanded its wastewater treatment capacity to 10.8mgd. The City's WWTP currently treats approximately 9.0mgd of wastewater. The City's WWTP provides secondary-level treatment of wastewater followed by disinfection. Treated effluent from the WWTP is conveyed to a submerged diffuser for discharge into the Old River. The WWTP has an NPDES permit for discharge into the Old River from the State Regional Water Quality Control Board. Prior to any development, a site-specific development application would be required. At that point, based on the details of a specific project, traffic and other utility analyses would be performed to identify appropriate measures and conditions of approval.

As described in the Tracy General Plan EIR, development under the General Plan has the potential to cause significant impacts by increasing stormwater runoff associated with construction activities and increasing impermeable surfaces, thereby placing greater demands on the stormwater handling system. Runoff from developed surfaces, building roofs, parking lots and roads also contain impurities and have the potential to increase flooding. The General Plan would address these potential impacts in several ways. Objective PF-8.2, Policy P1 directs new development projects to incorporate methods of reducing stormwater runoff to reduce requirements for downstream storm drainage infrastructure and improve stormwater quality. The General Plan also contains an action that also modifies the zoning ordinance to limit the amount of impervious surfaces in private yards (Objective PF-8.2, Action A1). These measures would mitigate potential impacts from increases in impermeable surfaces within the city. Additionally, the General Plan sets forth the City's policies and actions aimed at developing the stormwater collection system to satisfy future conditions and meet the needs of development. Objective PF-8.1, A1 and A2, directs the City to prepare a comprehensive update of the Storm Drainage Master Plan and update this plan on a periodic basis of at least every five years, in order to accurately evaluate flows and comprehensive improvement requirements based on the growth projections in the General Plan. The General Plan also calls for stormwater infrastructure to be maintained in good condition and for infrastructure to attain capacity that conforms with the Stormwater Management Plan, Storm Drainage Master Plan and the Parkways Design Manual (Objective PF-8.1, Policy P1 and Objective PF-8.2, Policy P2). Objective PF-8.2, Policy P3 calls for approval of development conditional upon existing or planned stormwater infrastructure that is in compliance with environmental regulations. Further, the General Plan contains a policy that requires temporary on-site retention facilities that are in conformance with City standards for new development if sufficient downstream stormwater infrastructure has not yet been constructed (Objective PF-8.2, Policy P4). Additional policies in the Land Use Element would coordinate the approval of development projects with the provision of infrastructure and public

services (Objective LU-1.4, Policy P5), call for a concentrated pattern of residential development (Objective LU-1.4, Policies P1 and P2), and encourage infill development (Objective LU-1.6, Policy P4). These policies would provide the City with a framework to ensure that new stormwater handling infrastructure can be provided to meet the needs of continuing development under the General Plan.

In order to ensure that stormwater runoff from project sites does not adversely increase pollutant levels in adjacent surface waters and stormwater conveyance infrastructure, the City requires the application of best management practices (BMPs) to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases. Additionally, projects are required to prepare a Stormwater Pollution Prevention Plan (SWPPP).

Future projects proposed under residential land use category would require the payment of fees and determined fair share fee amounts are adopted by the City as Conditions of Approval (COAs) for all new development prior to project approval. The payment of applicable development impact fees by the proposed Project would ensure that the project pays its fair-share of capital improvement fees towards future system expansions, as identified in the Tracy Wastewater Master Plan. According to the 2022 Wastewater Master Plan Update, the City is currently implementing capital improvements to increase WWTP capacity to serve current demand. Anticipated growth through 2040 will cause services needs to increase greatly in the coming years. To ensure that system capacity meets future demand, additional system upgrades are necessary and have been outlined in the Wastewater Master Plan Update as the “Revised Phase 1 Upgrades.”

Additionally, through compliance with the NPDES permit requirements, and compliance with the SWPPP, future development applications and projects would not result in a violation of any water quality standards or waste discharge requirements. The proposed Project is consistent with development of urban uses and the development footprints described in the General Plan and would be consistent with impacts previously identified. All future projects would be required to comply with General Plan policies as described above and would be required to fund future capacity improvements associated with General Plan buildout. No new impacts or impacts above and beyond what was previously analyzed by the Tracy General Plan EIR would occur. This is a **less-than-significant impact**.

Responses b), e): Less than Significant. The proposed Project does not propose and would not result in the construction of new groundwater wells, nor would it directly increase existing levels of groundwater pumping beyond what has been analyzed under the safe yield requirements. The City’s existing Groundwater Management Policy prohibits groundwater extraction to exceed 9,000 AF (the determined safe yield). The General Plan contains policies to address groundwater use and conservation that will assist in avoiding impacts to groundwater sources. As a result of adopted City policies and General Plan policies, a less-than-significant groundwater impact was determined by the General Plan EIR. The proposed Project would be required to be consistent with the General Plan safe yield requirements and individual future project would be required to assess water supply prior to approval. Thus, the proposed Project potential for groundwater depletion is consistent with the General Plan EIR finding of **less than significant**.

Groundwater recharge occurs primarily through percolation of surface waters through the soil and into the groundwater basin. Project implementation would result in more impermeable surfaced through development allowed during buildout of the General Plan. All Project rezone site are located within the city limits on parcels that have been identified for future development and urban uses.

As such, development footprint impacts have been identified and address by the General Plan EIR, and the Project would be consistent with previous findings and would be required to implement all policies sand objective such as those discussed above to ensure the groundwater basin remains at a safe yield. The proposed Project impacts related to depletion of groundwater supplies and interference with groundwater recharge would remain **less than significant**.

For additional information related to water supply see the Utilities Section of this report.

Responses c): Less than Significant. When land is in a natural or undeveloped condition, soils, mulch, vegetation, and plant roots absorb rainwater. This absorption process is called infiltration or percolation. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the site as storm water runoff.

The infiltration and runoff process is altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff may result in flooding if adequate storm drainage facilities are not provided.

As described in the Tracy General Plan EIR, development under the General Plan has the potential to cause significant impacts by increasing stormwater runoff associated with construction activities and increasing impermeable surfaces, thereby placing greater demands on the stormwater handling system. The General Plan address these potential impacts in several ways. Objective PF-8.2, Policy P1 directs new development projects to incorporate methods of reducing stormwater runoff to reduce requirements for downstream storm drainage infrastructure and improve stormwater quality. The General Plan also provided an action that modified the zoning ordinance to limit the amount of impervious surfaces included in Chapter 11.32 (Storm and Surface Water Management Enterprise and Utility). As described in the General Plan EIR These measures would mitigate potential impacts from increases in impermeable surfaces within the city. Additionally, the General Plan sets forth the City's policies and actions aimed at developing the stormwater collection system to satisfy future conditions and meet the needs of development. Objective PF-8.1, Actions A1 and A2, directs the City to prepare a comprehensive update of the

Storm Drainage Master Plan and update this plan on a periodic basis of at least every five years, in order to accurately evaluate flows and comprehensive improvement requirements based on the growth projections in the General Plan. The General Plan also calls for stormwater infrastructure to be maintained in good condition and for infrastructure to attain capacity that conforms with the Stormwater Management Plan, Storm Drainage Master Plan and the Parkways Design Manual (Objective PF-8.1, Policy P1 and Objective PF-8.2, Policy P2). Objective PF-8.2, Policy P3 calls for approval of development conditional upon existing or planned stormwater infrastructure that is in compliance with environmental regulations. Further, the General Plan contains a policy that requires temporary on-site retention facilities that are in conformance with City standards for new development if sufficient downstream stormwater infrastructure has not yet been constructed (Objective PF-8.2, Policy P4). Additional policies in the Land Use Element would coordinate the approval of development projects with the provision of infrastructure and public services (Objective LU-1.4, Policy P5), call for a concentrated pattern of residential development (Objective LU-1.4, P1 and P2) and encourage infill development (Objective LU-1.6, Policy P4). These policies would provide the City with a framework to ensure that new stormwater handling infrastructure can be provided to meet the needs of continuing development under the General Plan.

Pursuant to, and consistent with the Federal Water Pollution Control Act (Clean Water Act), future development project applications (greater than 1 acre) would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would require the application of best management practices (BMPs) to effectively reduce pollutants from stormwater leaving the site during both the construction and operational phases of the project.

Additionally, all projects are subject to the requirements of Chapter 11.34 of the Tracy Municipal Code – Stormwater Management and Discharge Control. The purpose of this chapter is to protect and promote the health, safety and general welfare of the citizens of the City by controlling non-stormwater discharges to the stormwater conveyance system, by eliminating discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater, and by reducing pollutants in urban stormwater discharges to the maximum extent practicable. This chapter is intended to assist in the protection and enhancement of the water quality of watercourses, water bodies, and wetlands in a manner pursuant to and consistent with the Federal Water Pollution Control Act (Clean Water Act, 33 U.S.C. section 1251 et seq.), Porter-Cologne Water Quality Control Act (California Water Code section 13000 et seq.) and National Pollutant Discharge Elimination System ("NPDES") Permit No. CAS000004, as such permit is amended and/or renewed.

New development projects in the City of Tracy are required to provide site-specific storm drainage solutions and improvements that are consistent with the overall storm drainage infrastructure approach presented in the City of Tracy Citywide Storm Drainage Master Plan. Future projects are required to submit detailed storm drainage infrastructure plans to the City of Tracy Development Services Department for review and approval. The storm drainage infrastructure plans must demonstrate adequate infrastructure capacity to collect and direct all

stormwater generated on the project site within onsite retention/detention facilities to the City's existing stormwater conveyance system, and demonstrate that the project would not result in on- or off-site flooding impacts. Future development projects are also required to pay all applicable development impact fees, which would include funding for offsite Citywide storm drainage infrastructure improvements identified in the City of Tracy Citywide Storm Drainage Master Plan. The collection of fees and determined fair share fee amounts are adopted by the City as Conditions of Approval (COAs) for all new development projects prior to project approval.

The proposed Project is consistent with the urban type development within the city limits described in the General Plan, and would subject to all General Plan and Municipal Code requirements (as described above) when future projects are proposed. As such the Project would be consistent with impacts previously identified by the General Plan EIR. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Response d): Less than Significant. The 100-year floodplain denotes an area that has a one percent chance of being inundated during any particular 12-month period. Floodplain zones are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist cities in mitigating flooding hazards through land use planning. FEMA also outlines specific regulations for any construction, whether residential, commercial, or industrial within 100-year floodplains.

The majority of the urbanized area of Tracy is outside of the 100-year flood plain and thus would not be at risk of flooding hazards. There are areas in the northern portion of the city limits in the I-205 Regional Commercial area and just north of I-205 and the Northeast Industrial Area, and within the Sphere of Influence or Planning Area that are within the 100-year floodplain.

To minimize the risk of exposing people or property to flood hazards, the General Plan includes a goal and an objective, supported by several policies and actions to minimize risks to development related to flooding and inundation (Goal SA-2, Objective SA-2.1). This goal and objective includes a policy that would prohibit development in areas within the 100-year floodplain, as mapped by FEMA, if it would result in any increased flooding risk and impacts related to flooding, such as increasing erosion or sedimentation, increased costs to providing emergency services during and after flooding, deterioration of water quality, among other conditions. Other policies included under this goal and objective would require that development, including public facilities, within the 100-year floodplain be flood-proofed at or above the base year flood elevation, and that the City would prevent the construction of flood barriers that divert flood water or increase flooding in other areas (Objective SA-2.1, Policies P2 and P3). A policy is also included to encourage property-owners within the 100-year floodplain to purchase National Flood Insurance (Objective SA-2.1, Policy P3). Actions to support Objective SA 2.1 direct the City to continue to participate in the National Flood Insurance Program, to implement the City's existing Storm Drainage Master Plan, which provides storm drainage capacity sufficient to contain 100-year and 10-year flood flows under specific conditions, and to require structures that are allowed to be built in areas of flood risk to be built in a manner to minimize that risk (Objective SA-2.1, Actions A1 through A3). Moreover, Chapter 9.52 of the Tracy

Municipal Code establishes regulations limiting new construction in an area of special flood hazard. As a result, the implementation of the General Plan EIR found its policies would reduce the potential impact associated with exposure to the 100-year flood plain to a less-than-significant level.

As shown below in Table-HYDRO 1, two rezone areas in the northern portion of the city (totaling 6.21 acres) are within the 100-year flood hazard area as delineated by FEMA.

Table - HYDRO 1: Rezone Area Acreages within the FEMA 100-Year Floodplain.

Rezone Site APN	Acres included within FEMA-100 Flood Hazard Area
212-050-35	4.21
212-270-20	2.00
Total (Acres)	6.21

Sources: San Joaquin County GIS; Arc GIS Online World Topographic Map Service .Map date: May 7, 2024.

The proposed Project is consistent with urban and developed uses identified throughout the city limits in Tracy and would be subject to all General Plan policies and objectives related to flood protection, and the City's floodplain regulations included within Chapter 9.52 of the Tracy Municipal Code. As such this impact would be considered **less than significant**.

The nearest dam inundation areas are at the northernmost parts of the city and are subject to inundation by the San Luis Reservoir and New Melones Dams. The safety of dams in California is stringently monitored by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring the dam in perpetuity. There will always be a remote chance of dam failure that results in flooding of portions of the City. The proposed Project would not result in actions that could result in a higher likelihood of dam failure at San Luis Reservoir and New Melones dams. As such, this is considered **less than significant**.

There are no significant bodies of water near the city that could result in the occurrence of a seiche or tsunami. Additionally, the city and the surrounding areas are relatively flat, which precludes the possibility of mudflows. This is a **less-than-significant impact**.

XI. LAND USE AND PLANNING -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), there are no significant impacts to land use and planning.

RESPONSES TO CHECKLIST QUESTIONS

Responses a): No Impact. The proposed Project includes text amendments to the General Plan and Zoning Code as well as the rezoning of sites identified by the City's Housing Element to meet the City's RHNA. All rezone sites are within the existing city limits and all parcels have previously been designated for urban and developed types site uses. The rezoning program and zoning updates would increase the residential development capacities in sites within the city in areas planned for urban development. As such, the project would not divide an established community. There is **no impact**.

Responses b): Less than Significant. The proposed Project does not directly propose any development or activities that would convert areas retained for preservation, and does not propose any policies or actions that would be in conflict with policies that mitigate impacts. The Project includes updated to the zoning code and General Plan to accommodate the City's RHNA as described in the Project Description. Ultimately the Project would result in increased allowed residential development to support local and regional housing needs goals. All rezone sites associated with the proposed Project are located within the existing city limits and within areas of the city that included existing and planned development. No new impacts or impacts above and beyond what was previously analyzed would occur with respect to conflicts with policies and programs. The proposed Project includes updates to support housing goals and the City's RHNA through General Plan, and zoning amendments that are consistent with the City's Adopted Housing Element and constitute planned growth. As such, this is a **less-than-significant impact**.

XII. MINERAL RESOURCES -- WOULD THE PROJECT:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), there are no significant impacts to mineral resources.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. As described in the Tracy General Plan EIR, the main mineral resources found in San Joaquin County, and the Tracy Planning Area, are sand and gravel (aggregate), which are primarily used for construction materials like asphalt and concrete. According to the California Geological Survey (CGS) evaluation of the quality and quantity of these resources, the most marketable aggregate materials in San Joaquin County are found in three main areas:

- In the Corral Hollow alluvial fan deposits south of Tracy
- Along the channel and floodplain deposits of the Mokelumne River
- Along the San Joaquin River near Lathrop

Figure 4.8-1 of the General Plan EIR identifies Mineral Resource Zones (MRZs) throughout the Tracy Planning Area. The proposed Project does not include project components that would directly impact mineral resources. Additionally, all identified rezone site are located within the existing city limits in parcels that have been identified for urban types uses and would be consistent with previously environmental analysis include within the Tracy General Plan Draft and EIR as the development footprint impacts would remain the same. As such, the project would not result in the loss of availability of a known mineral resource. As such this is considered **less than significant**.

XIII. NOISE -- WOULD THE PROJECT RESULT IN:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), there would be two significant and unavoidable noise impacts under the General Plan and Sustainability Action Plan. As discussed in detail in Section 4.14, future noise level increases (3 dBA Ldn or greater) from increased traffic associated with new and existing roadways facilitated by the General Plan would occur adjacent to existing noise sensitive uses. This would result in a significant impact at the project and cumulative level.

RESPONSES TO CHECKLIST QUESTIONS

Responses a-b): Potentially Significant. Based on existing and projected noise levels along roadways, and the potential for noise generated during operational activities associated with increased development densities and possible increased in roadway volumes associated with these increases allowed under the propose Project, it has been determined that the potential impacts from noise caused by the proposed Project rezone programs and density updated to support housing goals will require a detailed analysis in the EIR. As such, the lead agency will examine each of the two potentially significant environmental issues listed in the checklist above in the EIR and will decide whether the proposed Project has the potential to have a significant impact from noise. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather both are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The noise analysis will identify the noise level standards contained in the City of Tracy General Plan Noise Element and Municipal Code (Noise Control Ordinance, Chapter 4.12 Article 9), as well as any state, and federal standards.

The EIR will provide an estimate of existing traffic noise levels on roadway segments through application of accepted traffic noise prediction methodologies. The EIR will include thresholds of

significance, a program-level impact analysis, cumulative impact analysis, and a discussion of feasible measures that should be implemented to reduce any potential impacts associated with noise.

Response c): Less than Significant. The Tracy Municipal Airport is located in the southern portion of the City's Planning Area. The Airport is a general aviation airport owned by the City and managed by the Public Works Department. The City of Tracy adopted an Airport Master Plan in 1998, analyzing the impacts to safety on surrounding development from the Tracy Municipal Airport. The San Joaquin County Airport Land Use Plan establishes noise contours surrounding the Tracy Municipal Airport. The proposed Project does not propose or approve any development projects that would directly expose people to excessive aircraft noise. Additionally, the Project rezoned sites are located outside of the noise contours for the Tracy Municipal Airport. As such, the Project would not be exposed to excessive noise from the Tracy Municipal Airport. This is a **less-than-significant impact**.

XIV. POPULATION AND HOUSING -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), There would be two significant and unavoidable impacts to population and housing growth as a result of the General Plan. Despite policies and regulations designed to reduce impacts to future population and housing growth, development under the General Plan at total buildout would result in significant increases in residential and employee populations, relative to existing conditions, which would result in a project-level and a cumulative impact.

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. The proposed Project does not directly propose any development or activities that would displace people or housing. The project includes updates to the Zoning Code and General Plan to accommodate the City's RHNA as described in the Project Description. Ultimately the Project could result in increased allowed residential development to support local and regional housing goals. All rezone sites associated with the proposed Project are located within the existing city limits and within areas of the city that included existing and planned development. As such, there is existing infrastructure (roads, water, sewer, etc) in the immediate vicinity of all rezone sites. While future developments would extend services onto currently undeveloped sites to serve the future development, the Project would not result in or extend infrastructure to an area of the City not currently served, or areas that don't have existing plans and programs for services. The proposed Project includes updates to support housing goals and the City's RHNA through General Plan, and zoning amendments that are consistent with the City's Adopted Housing Element and constitute planned growth. As such, this is a **less-than-significant impact**.

Responses b): Less than Significant. The proposed Project does not propose any development or activities that would displace people or housing. The project includes updates to the zoning code and General Plan to accommodate the City's RHNA as described in the Project Description. Ultimately the Project could result in increased allowed residential development to support local and regional housing goals. As such, the Project would not displace people or existing housing and would have a **less-than-significant impact** relative to this topic.

XV. PUBLIC SERVICES -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
• Fire protection?			X	
• Police protection?			X	
• Schools?			X	
• Parks?			X	
• Other public facilities?			X	

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), There are no significant impacts to community services, including police, fire, schools, solid waste collection and disposal, and parks and recreation facilities.

*RESPONSES TO CHECKLIST QUESTIONS***Responses a)i, a)ii, a)iii, a)v: Less than Significant.**

Police: Implementation of the General Plan would allow for an additional and development to occur throughout the planning area which would increase the need for police services. The General Plan contains policies that were designed to provide police services in an efficient manner. The Land Use Element of the General Plan outlines two objectives to foster the efficient match of public facilities to development. Objective LU-1.3 would ensure that public facilities are accessible and distributed evenly and efficiently throughout the City, and that residential development is directed in a way to maximize the use of existing public services and infrastructure (Objective LU-1.4). In addition, the City would continually strive for improved performance and efficiency of the Tracy Police Department (Objective PF-2.1, Policy P3), and would review all project proposals for potential law enforcement hazards and encourage the use of physical site planning for crime prevention. Specific action items are also included under Objective PF-2.3 to maintain and improve law enforcement services to keep up with Tracy's changing population and help reduce crime in general.

Since some level of staffing increases would be needed over the life time of the General Plan, there may be a need for new or expanded police facilities in the City. The General Plan does not specifically identify where potential expansions or new police facilities would occur since it would depend on the location and timelines of new development. The General Plan includes policies requiring new development to pay its fair share of these expenses through an assessed public facilities impact fee (Objective PF-2.1, Policy P2).

Since the proposed General Plan is general in nature and the exact location and timing of future growth is yet to be determined, it is unknown at this time to what extent existing police facilities would be expanded, or if new substations or police stations would be required. Public facilities would be allowed under a variety of land uses, so their locations could occur in many within the city and SOI. The specific environmental impact of constructing police facilities to support future growth under the General Plan cannot be determined at this time as no plans for such facilities exist. As specific facility projects are identified, and proposed additional environmental analysis would be completed pursuant to city and CEQA review requirements. As such this impact is considered **less than significant**.

Fire: As new development occurs under the General Plan, there would be increased demand for fire and emergency medical protection services including the potential need for additional services and facilities. . The location of new and expanded facilities would be dependent on many factors including the rates of growth and locations of new development, which is not known at this time.

The General Plan includes policies to ensure that adequate related facilities are funded and provided to meet future growth (Objective PF-1.1, Policy P1). Similar to the provision of police services discussed above, Objective PF-1.1 states that the City would strive to continuously improve the performance and efficiency of fire protection and emergency medical services. New developments would satisfy fire flow and hydrant requirements and other design requirements as established by the City (Objective PF-1.2, Policy P5).

The proposed General Plan also outlines land use policies to take advantage of the use of existing public services and minimize the need for additional ones. Objective LU-1.3 would ensure that public facilities are accessible and distributed evenly and efficiently throughout the City, and that residential development is directed in a way to maximize the use of existing public services and infrastructure (Objective LU-1.4).

Furthermore, the proposed General Plan supports the City's adopted Growth Management Ordinance (described in detail in Section 4.1: Land Use), which is intended to achieve a steady and orderly growth pattern to ensure adequate levels of service. The Residential Growth Management Ordinance (GMO) and Growth Management Ordinance Guidelines (GMO Guidelines) regulate the rate and timing of new residential development, encouraging a balance of housing types, encouraging growth that maximizes use of existing and future public services and infrastructure, and encouraging diverse housing opportunities.

The specific environmental impact of constructing new fire and emergency medical response facilities to support the growth allowed under the General Plan cannot be determined at this time as no facilities are proposed or would be specifically required through adoption of the program level Project. Potentially impacts that may result from the development and operation of these facilities are addressed by various plans, policies and mitigation requirements identified in the Tracy General Plan EIR. As specific fire and emergency response facility expansion projects are identified, additional project-specific, environmental analysis would be completed pursuant to city and CEQA requirements. As such this impact is considered **less than significant**.

Schools: Implementation of the General Plan would ultimately increase demand for school facilities. Additional staff, equipment and facilities would also be required.

Future development applications would be subject to the Tracy Unified School District's impact fees from new developments under the provisions of SB 50. Payment of the applicable impact fees, and ongoing revenues that would come from taxes, would fund capital and labor costs associated with school services. The adequacy of fees is reviewed on an annual basis to ensure that the fee is commensurate with the service.

No development would be proposed or approved as part of the proposed project rezone. The specific environmental impact of constructing new facilities to support the growth allowed under the General Plan cannot be determined at this time as no facilities are proposed or would be specifically required through adoption of the program level Project. Potentially impacts that may result from the development and operation of these facilities are addressed by various plans, policies and mitigation requirements identified in the Tracy General Plan EIR. As facility expansion projects are identified, additional project-specific, environmental analysis would be completed pursuant to city and CEQA requirements. As such this impact is considered **less than significant**.

Response a) iv: Less Than Significant. Potential impacts to parks and recreational facilities are addressed in the following Recreation (Section XVI) of this document.

XVI. RECREATION -- WOULD THE PROJECT:

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

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), There are no significant impacts to community services, including parks and recreation facilities.

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Less than Significant. New development under the General Plan has the potential to increase the demand for parks and recreational facilities. Future parks have not been identified. In order to maintain the City's park standard, the City requires new development projects to either include land dedicated for park uses, or to pay in-lieu fees towards the City's parks program. Chapter 13.12 of the Tracy Municipal Code states that, "all development projects shall be required to maintain the City standard of four (4) acres of park land per 1,000 population. All development projects, as a condition of approval of any tentative parcel map or tentative subdivision map, or as a condition of approval of any building permit, shall dedicate land to the City or pay a fee in lieu thereof, or a combination of both, in order to maintain this City standard. The precise obligation of any development project to dedicate land or pay a fee pursuant to this section shall be incorporated in the implementing resolution for the park fee applicable to the development project."

As described previously, the proposed Project does not propose and would not approve any development projects and would not result in the physical deterioration of existing parks and facilities within Tracy, nor does the Project propose the construction of new park facilities. The specific environmental impact of constructing new park and recreation facilities to support the growth allowed under the General Plan cannot be determined at this time as no facilities are proposed or would be specifically required through adoption of the program level Project. Potentially impacts that may result from the development and operation of these facilities are addressed by various plans, policies and mitigation requirements identified in the Tracy General Plan EIR. As facility expansion projects are identified, additional project-specific, environmental analysis would be completed pursuant to city and CEQA requirements. As such this impact is considered **less than significant**.

XVII. TRANSPORTATION/TRAFFIC -- WOULD THE PROJECT:

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

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Potentially Significant. Senate Bill 743 (SB 743) adopted on September 27, 2013 directs the California Office of Planning and Research (OPR) to administer new CEQA guidance for jurisdictions that removes automobile vehicle delay and level of service (LOS) from CEQA analysis and replaces it with vehicle miles traveled (VMT) analysis or other measures that “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses,” to be used as a basis for determining significant transportation impacts. The change from LOS to VMT is intended to balance the needs of congestion management with statewide goals related to infill development, the promotion of public health, and the reduction of greenhouse gas emissions.

The proposed Project would include rezone site and zoning amendments as described in the Project Description that could increase traffic on existing and planned roadways through the buildout of the General Plan. Based on existing and projected traffic volume levels along roadways and potential increases in VMT as a result of the project, it has been determined that traffic impacts will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will determine whether the proposed Project has the potential to have a significant impact to circulation. At this point a definitive impact conclusion for each of these environmental topics will not be made; rather all are considered **potentially significant** until a detailed analysis is conducted in the EIR.

The EIR will include a Traffic Analysis to address the impacts of the proposed Project on the transportation system including The EIR will analyze and model VMT. Potential impacts associated with circulation, and consistency with CEQA Guidelines section 15064.3, subdivision (b) will be addressed in the EIR. Significant impacts will be identified in accordance with the established criteria, and measures will be identified to lessen the significance of any potential impacts. The EIR will provide an analysis including the thresholds of significance, a project-level

impact analysis, cumulative impact analysis, and a discussion of feasible measures that should be implemented to reduce any significant impacts associated with transportation.

Responses c), d): Potentially Significant. The proposed Project includes rezone areas that would allow for an increase in the development capacity of some parcels. These increases could increase traffic on existing and planned roadways. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will determine whether the proposed project has the potential to have a significant impact from traffic. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is conducted in the EIR.

The EIR will include a transportation analysis to address the potential impacts associated with transportation hazards including emergency access. The EIR will provide an analysis including the thresholds of significance, a program-level impact analysis, cumulative impact analysis, and a discussion of feasible measures that should be implemented to reduce any identified impacts associated with transportation hazards.

XVIII. TRIBAL CULTURAL RESOURCES -- WOULD THE PROJECT:

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

RESPONSES TO CHECKLIST QUESTIONS

Responses a), b): Potentially Significant. The proposed Project does not propose any development or ground disturbing activities that would impact cultural or tribal cultural resources. Prior to any development, a site-specific development application would be required. At that point, based on the details of a specific project, reviews would be performed to identify appropriate measures and conditions of project approval. Additionally, the General Plan Objective CC 3.1 Policy P4 includes as part of the development review process, 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.

However, based on known resources in the region, and the potential for undocumented underground cultural resources in the region, and the potential for new information through the consultation process, it has been determined that the potential impacts on tribal cultural resources will require a detailed analysis in the EIR. As such, the lead agency will examine the environmental issues listed in the checklist above in the EIR and will decide whether the proposed Project has the potential to have a significant impact on tribal cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include an overview of the prehistory and history of the area, the potential for tribal cultural resources to be found in the area, the types of tribal cultural resources that may be expected to be found, a review of existing regulations and policies that protect tribal cultural resources, an impact analysis, and any mitigation that should be implemented in order to reduce

potential impacts to tribal cultural resources. In addition, the CEQA process will include a request to the Native American Heritage Commission for a list of local Native American groups that should be contacted relative to this project, as per the requirements of AB 52. The CEQA process will also include consultation with any Native American groups that have requested consultation with the City of Tracy.

XIX. UTILITIES AND SERVICE SYSTEMS -- WOULD THE PROJECT:

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	X			
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	X			
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	X			
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reductions goals?	X			
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	X			

PREVIOUS ENVIRONMENTAL FINDINGS INCLUDED IN THE TRACY GENERAL PLAN EIR.

As discussed in the General Plan's Draft EIR (inclusive of Amendments to the General Plan Draft EIR, and Supplemental Review), Two significant and unavoidable impacts related to infrastructure would result under the General Plan. The General Plan EIR found that while the project would not contribute to significant project-level or cumulative impacts associated with water services during the 20-year planning horizon, it would contribute to a project level and a cumulative significant and unavoidable impact at total buildout. Despite policies included in the General Plan calling for the acquisition of reliable, additional sources of water, current supplies are insufficient for the projected development at total buildout of the General Plan; regional water supplies are also not ensured into the future beyond a 20-year planning horizon.

The General Plan's Draft EIR found that there are no significant impacts to solid waste collection and disposal.

RESPONSES TO CHECKLIST QUESTIONS

Responses a) through e): Potentially Significant. Implementation of the proposed Project could result in increased demands for utilities to serve the project. All rezone areas are within the existing city limits, and utilities and services such as electric power, natural gas, and telecommunications are readily available to serve future development within the city. As such, these topics won't be discussed further. The EIR will examine each of the environmental issues

listed in the checklist above related to water, wastewater, and storm drainage, and solid waste, and will decide whether the proposed Project has the potential to have a significant impact to these utilities and service systems. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will analyze wastewater, water, and drainage, as well as other utilities (i.e., solid waste), that are needed to serve future development. The wastewater assessment will include a discussion of the proposed collection and conveyance system, treatment methods and capacity at the treatment plants, and disposal location(s) and methods. The proposed infrastructure will be presented. The EIR will provide a discussion of the wastewater treatment plants, including current demand and capacity at these plants. The analysis will discuss the disposal methods and location, including environmental impacts and permit requirements associated with disposal of treated wastewater.

The EIR will identify permit requirements and mitigation needed to minimize and/or avoid impacts. The proposed infrastructure will be presented.

The EIR will include an assessment for consistency with City Master Plans and Management Plans that are directly related to these utilities.

The EIR will analyze the impacts associated with water supply. The results of a utilities assessment will be provided. The EIR will also identify permit requirements and any mitigation needed to minimize and/or avoid impacts.

The EIR will also address solid waste collection and disposal services for the proposed Project. This will include an assessment of the existing capacity and future buildout demands. The assessment will identify whether there is sufficient capacity to meet the Project's projected demands.

The EIR will provide thresholds of significance, impact analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts (if identified) associated with utilities and service systems.

XX. WILDFIRE -- WOULD THE PROJECT:

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

Responses to Checklist Questions

Responses a) through d): Less than Significant. CAL FIRE has determined that San Joaquin County (including the City of Tracy) has no Very High Fire Hazard Severity Zones in Local Responsibility Areas (LRAs). All rezone areas are within LRA's. The nearest delineated fire hazard areas are included in SRAs within San Joaquin County. Additionally, no lands adjacent to the City of Tracy city limits are designated as a VHFHSZ.

Lands to the west of the city limits (included in the City's SOI) within a SRAs include moderate and high FHSZ. These lands are designated for open space uses, and no development would be approved or is proposed by the project in these areas. Rezone areas are all within the city limits, and no additional changes or modifications to the City's General Plan Land Use Map, or Zoning Map are proposed at this time. The proposed Project is consistent with the development footprint described in the Existing General Plan EIR and the urban development use types described in the General Plan, and would be consistent with impacts previously identified by the General Plan EIR. No new impacts or impacts above and beyond what was previously analyzed would occur. As such, this impact is considered **less than significant**.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	X			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

RESPONSES TO CHECKLIST QUESTIONS

Response a): Less than Significant. As described throughout the analysis above, the proposed Project would not result in any impacts that would substantially reduce 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.

Additionally, the cumulative impacts associated with future development applications within the city were considered, analyzed and disclosed in the City of Tracy General Plan and General Plan EIR. On February 1, 2011 the Tracy City Council adopted a Statement of Overriding Considerations (Resolution 2011-028) for all significant impacts associated with buildout of the Tracy General Plan. The project would not result in any cumulative impacts that were not contemplated in the General Plan EIR. The project would not result in any peculiar site-specific impacts, impacts to biological resources or impacts to cultural and/or historical resources.

The proposed Project is consistent with the development footprint described in the General Plan EIR and the urban development use types described in the General Plan and would be consistent with impacts previously identified by the General Plan EIR. Prior to any development, a site-specific development application would be required. At that point, based on the details of a specific project, additional analyses would be performed. The proposed Project is consistent with the urban development types and identified uses found throughout the Tracy city limits and described in the General Plan and would be consistent with impacts previously analyzed in the

General Plan EIR. No new impacts or impacts above and beyond what was previously analyzed would occur. This is a **less-than-significant impact**.

Responses b), c): Potentially Significant. The General Plan EIR assumed full development and buildout of the Planning Area, consistent with the uses and residential densities included in the existing adopted General Plan. However, the proposed Project includes a rezone program to meet statewide and regional housing goals; densities on rezoned parcels included within the rezone program, and density ranges associated with multi-family housing designations would be increased from those described in the General Plan.

As such, it has been determined that the potential for the proposed Project to create cumulatively considerable impacts, or adversely affect human beings will require more detailed analysis in an EIR. As such, the City of Tracy will examine each of these environmental issues in the EIR and will decide whether the proposed Project has the potential to have significant impacts on these environmental issues. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

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- California Williamson Act Contracts Map (California Department of Conservation, San Joaquin County September 2013-2014). Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/wa/>
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APPENDIX B

NOP Comment Letters

June 17, 2024

City of Tracy
Community & Economic
Development Department

From: [Laurel Boyd](#)
To: [Miranda Aguilar](#)
Subject: RE: Notice of Preparation of an EIR for the City of Tracy Rezone Program and General Plan Amendment - Interested Parties (Housing Element & CEQA)
Date: Monday, June 17, 2024 7:34:55 AM

Caution: This is an external email. Please take care when clicking links or opening attachments.

Good morning Miranda,

SJCOG, Inc. will not be responding to the NOP of an EIR for the Tracy Rezone and GP Amendment as there's no project tied to this notice.

Sincerely,

Laurel K Boyd
Associate Habitat Planner

SJCOG, Inc.

555 E. Weber Avenue

Stockton, CA 95202

Phone: (209) 235-0574

Fax: (209) 235-0438

Email: boyd@sjcog.org

From: Miranda Aguilar <Miranda.Aguilar@cityoftracy.org>

Sent: Thursday, June 13, 2024 5:59 PM

Subject: Notice of Preparation of an EIR for the City of Tracy Rezone Program and General Plan Amendment - Interested Parties (Housing Element & CEQA)

External Email:

Hello Everyone,

Please see attached for a Notice of Preparation of an EIR for the City of Tracy Rezone Program and General Plan Amendment.

You may view the public hearing notice at the following locations:

<https://www.cityoftracy.org/our-city/departments/planning>

<https://www.cityoftracy.org/government/public-notice>

[https://www.cityoftracy.org/our-city/departments/planning/specific-plans-environmental-impact-](https://www.cityoftracy.org/our-city/departments/planning/specific-plans-environmental-impact)

[reports-and-initial-studies](#)

Thank you,

Miranda Aguilar | City of Tracy

Administrative Assistant

Community & Economic Development – Planning Division

333 Civic Center Plaza | Tracy, CA 95376

Office: (209) 831.6421 | Miranda.Aguilar@cityoftracy.org



NATIVE AMERICAN HERITAGE COMMISSION

June 17, 2024

Craig Hoffman
City of Tracy
333 Civic Center Plaza
Tracy CA 95376

Re: 2024060655, City of Tracy Rezone Program and General Plan Amendment Project, San Joaquin County

Dear Mr. Hoffman:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b) (CEQA Guidelines § 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.



CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yakaya Pomo, Yuki,
Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

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AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
 - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code § 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code § 5097.9 and § 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@NAHC.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse



MUWEKMA OHLONE INDIAN TRIBE

OF THE SAN FRANCISCO BAY AREA REGION

’Innu Huššištak Makiš Mak-Muwekma “The Road To The Future For Our People”

TRIBAL CHAIRPERSON

CHARLENE NIJMEH

EXECUTIVE DIRECTOR OF
CULTURAL RESOURCES/MLD

RICHARD MASSIATT

TRIBAL COUNCIL

JOANN BROSE
FRANK RUANO
SHEILA SCHMIDT
CAROL SULLIVAN

TRIBAL ARCHAEOLOGIST
AND ETHNOHISTORIAN

ALAN LEVENTHAL

July 5, 2024

Mr. Craig Hoffman, Senior Planner
City of Tracy
333 Civic Center Plaza
Tracy, CA 95376
Email: craig.hoffman@cityoftracy.org

Dear Mr. Hoffman,

Thank you for contacting our Tribal administration with regards to the City’s Notice of Preparation and Scoping Meeting for the Draft Environmental Impact Report for City of Tracy Rezone Program and General Plan Amendment Scoping Meeting: July 10, 2024 at 7pm. Planning Commission Hearing, at the Tracy City Council Chambers.

The City of Tracy is informing our Tribe of their intention of amending their General Plan. In your letter you state that “The proposed project analyzes the environmental impacts related to a rezoning program to accommodate regional housing needs, and a targeted update to the City’s General Plan, including the Land Use Element, Circulation Element, Safety Element, and the of an Environmental Justice Element. No specific development projects are proposed as part of the project.”

Our principal response is that the Muwekma Ohlone Tribal leadership respectfully requests to be included in this process by establishing tribal consultation meetings with the City of Tracy as proscribed under the provisions of the California Environmental Quality Act (CEQA), California Public Resources Code, SB 18, and AB 52 relative to the mitigation of potential adverse impacts to any of our recorded and unrecorded tribal ancestral heritage sites that may exist within any current and/or proposed construction projects located within the boundaries of the City of Tracy.

The Muwekma Ohlone Tribe of the San Francisco Bay Area requests formal notification and information for any such projects, and any projects within the City’s geographical jurisdiction. Furthermore, we request consultation under extant state laws and statutes that includes any and all negative declarations, determinations of significance, proposed mitigation measures, that potentially addresses any significant adverse impacts to our ancestral heritage village and cemetery sites, relative to specific projects under the jurisdiction of the City of Tracy and its agencies.

As you may already know the City of Tracy falls within of ethnohistoric tribal territory to which we have direct lineal descent of ancestral tribal groups within and surrounding the greater Tracy area which include the Tamcan, Josmite of the greater Byron-Tracy region, and the neighboring Pasasimne, Yatchicumne, Lacquisemne Delta/North Valley Yokut-speaking tribes, and the Luecha and Ssoaom Ohlone-Speaking tribes that were missionized into Mission San Jose. (see BAE John Peabody Harrington’s interviews of Muwekma Elders 1925-1934; Milliken 1995, 2008, Milliken et al. 2009).

Muwekma Ohlone Tribe of the San Francisco Bay Area

1169 S. Main Street, Ste.#336 Manteca, CA 95337

Our Tribe has been engaged in CRM work since the mid-1980s and have published many archaeological reports pertaining to our ancestral heritage sites and human remains including recent burial recovery field work at several sites in the Sunol region under the jurisdiction of the San Francisco Public Utilities Commission and Caltrans: **CA-ALA-565** which our Tribe named **Sii Tiupentak** meaning **Place of the Water Roundhouse Site**; **CA-ALA 677 Aytukis 'Ete Hiramwis Trepan-tak** (**Place of Woman Sleeping Under the Pipe**); and **CA-ALA-704 Rumney Ta Kučuwis Tiprectak** (**Place of the Stream of the Lagoon Site**). We have also co-authored many journal articles with many scholars from various universities and private CRM firms on our ancestral remains, ceremonial grave regalia, AMS dating, Stable Isotope, and modern and aDNA studies (see attached).

Furthermore, as you may already know, our Tribe is a previously federally recognized tribe historically identified by the Bureau of Indian Affairs as the **Verona Band of Alameda County** which was never terminated by any act of Congress. Our aboriginal territory includes direct descent within the greater San Francisco Bay Region and specifically from the greater Tracy area.

We are attaching other historic documents and an examples of our previous ancestral heritage recovery work for your review and consideration. and look forward in working closely with you and the City of Tracy on any future related projects within our ethnohistoric homeland.

Sincerely,



Charlene Nijmeh, Chairwoman, Muwekma Ohlone Tribe



Richard Massiatt, Executive Director CRM and MLD Muwekma Ohlone Tribe



Alan Leventhal, Muwekma Ohlone Tribal Archaeologist

Cc: Muwekma Tribal Council
Cultural Resources File:
City of Tracy General Plan Project
Attachments

Ancient and modern genomics of the Ohlone Indigenous population of California

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Edited by Anne Stone, School of Human Evolution and Social Change, Arizona State University, Tempe, AZ; received June 27, 2021; accepted January 18, 2022

Traditional knowledge, along with archaeological and linguistic evidence, documents that California supports cultural and linguistically diverse Indigenous populations. Studies that have included ancient genomes in this region, however, have focused primarily on broad-scale migration history of the North American continent, with relatively little attention to local population dynamics. Here, in a partnership involving researchers and the Muwekma Ohlone tribe, we analyze genomic data from ancient and present-day individuals from the San Francisco Bay Area in California: 12 ancient individuals dated to 1905 to 1826 and 601 to 184 calibrated years before the present (cal BP) from two archaeological sites and eight present-day members of the Muwekma Ohlone tribe, whose ancestral lands include these two sites. We find that when compared to other ancient and modern individuals throughout the Americas, the 12 ancient individuals from the San Francisco Bay Area cluster with ancient individuals from Southern California. At a finer scale of analysis, we find that the 12 ancient individuals from the San Francisco Bay Area have distinct ancestry from the other groups and that this ancestry has a component of continuity over time with the eight present-day Muwekma Ohlone individuals. These results add to our understanding of Indigenous population history in the San Francisco Bay Area, in California, and in western North America more broadly.

genes and languages | identity by descent | Indigenous population genetics | paleogenomics | Penutian hypothesis

Among the geographic regions of North America, California is one of the areas with the greatest cultural and linguistic diversity of Indigenous peoples (1–3). With significant coastal and terrestrial ecological productivity, the region supported large pre-contact populations with the highest population density in North America (4–6). The geographic, cultural, and linguistic complexity of California at European contact contributed to considerable structuring among the Indigenous groups speaking more than 78 mutually unintelligible languages within six major linguistic families (3, 7). Today, California is home to 109 federally recognized sovereign tribal nations and more than 40 non-federally recognized tribal groups.

Considering regions within California, the area surrounding San Francisco Bay in Northern California supported some of the highest regional population densities at the start of European colonization in 1776 (8, 9). Indeed, the 21 Spanish mission locations in California, which were situated in a manner that correlated with Indigenous population density, included five missions located near San Francisco Bay. Population reconstructions using Spanish mission baptismal recruitment records reveal that at contact, more than 15,000 Native Americans from five distinct language groups were residing in sedentary villages within 45 territorial communities (land-controlling autonomous polities) within 20 km of the bay (9–11). Extensive investigation

of the region's dense archaeology has produced a trans-Holocene record, revealing that intensive sedentary or semisedentary habitation extends back >5,000 y (11–14).

With a rich regional archaeological record spanning >11,000 y of Indigenous habitation (14), much potential exists for coproduction of knowledge by recovering ancient DNA from Indigenous ancestors and jointly analyzing genetic and archaeological data. To date, however, California and the San Francisco Bay Area have seen little attention in paleogenomic studies. The most detailed study of ancient human genomic data in California has focused on Southern California, considering populations from the Channel Islands (15); additional significant studies of nearby regions have examined Lovelock Cave and Spirit Cave in Nevada (16), as well as the Pacific Northwest (16–18) and Northern Mexico (15, 19).

With generally sparse geographic coverage and relatively few ancient individuals from North America investigated using genomics, studies in the region have often focused on questions concerning initial entry of Indigenous populations into the Americas and broad-scale migration history of early Indigenous

Significance

California supports a high cultural and linguistic diversity of Indigenous peoples. In a partnership of researchers with the Muwekma Ohlone tribe, we studied genomes of eight present-day tribal members and 12 ancient individuals from two archaeological sites in the San Francisco Bay Area, spanning ~2,000 y. We find that compared to genomes of Indigenous individuals from throughout the Americas, the 12 ancient individuals are most genetically similar to ancient individuals from Southern California, and that despite spanning a large time period, they share distinctive ancestry. This ancestry is also shared with present-day tribal members, providing evidence of genetic continuity between past and present Indigenous individuals in the region, in contrast to some popular reconstructions based on archaeological and linguistic information.

Author contributions: A.L.S., B.F.B., C.N., M.V.A., A.L., N.A.R., and R.S.M. designed research; A.L.S., B.F.B., E.K.M., A.C.O., A.d.F., C.N., M.V.A., A.L., N.A.R., and R.S.M. performed research; A.L.S., B.F.B., M.D., N.A.R., and R.S.M. analyzed data; and A.L.S., B.F.B., N.A.R., and R.S.M. wrote the paper.

The authors declare no competing interest.

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groups (15, 16, 19, 20). Studies have often focused on the information revealed about broad-scale population history from a small number of individuals (21–24), with relatively few studies focusing on a specific geographic area and considering multiple sampled individuals (17, 18); another limitation has been the use of genetic sites in mitochondrial DNA rather than genome-wide (25).

In this study, in partnership of researchers with the Muwekma Ohlone tribe of the San Francisco Bay Area, we examine a time transect of a single region of Indigenous habitation, centered on Sunol on the southeast side of San Francisco Bay. The Muwekma Ohlone are one of the descendant communities of Ohlone who originally occupied ~4.3 million acres from San Francisco to Monterey and from the coast to the upland edge of the Central Valley. The Muwekma Ohlone comprise all the lineages who trace their ancestry through the Bay Area Missions of San Francisco, Santa Clara, and San Jose and who were also members of the historic previously federally recognized Verona Band of Alameda County who resided on the Pleasanton (Alisal), Sunol, Livermore (Del Mocho), and Niles (El Molino) rancherias from post-Spanish mission secularization (1834) to the early 1900s.

We consider human paleogenomic analysis from burials at two adjacent ancestral Ohlone settlements set away from the bay margin near Sunol, one dated to 2,440 to 175 cal BP, the other to 605 to 100 cal BP (26, 27). We also present information derived from living members of the Muwekma Ohlone tribe, considering that their ancestral lands include this locality and noting their strong historical ties to this region in particular that persist to the present day (SI Appendix, Table S1). Tribal members trace familial connections to the Sunol region (a 5-mile radius around Sunol includes the historic rancherias listed above and Mission San Jose) over many generations, as reported in interviews with tribal elders and genealogical analysis (28–30). This investigation, considering multiple groups across a range of time periods, provides a case example of joint ancient and modern DNA analysis in a single regional setting.

We combine information from traditional knowledge, genetics, and archaeology to examine the three sets of individuals. First, we investigate the ancient Bay Area individuals in relation to other ancient persons from the Americas, focusing attention on California and surrounding regions. Next, we examine the relationships of individuals between the two sites as well as between the ancient individuals and the modern tribal members, assessing the possibility of genetic continuity among these groups. The analysis reveals that genetic links between ancient and modern populations are evident despite the extreme disruption to the Ohlone that occurred during Spanish occupation and subsequent incorporation of the region into Mexico and then the United States—including forced migration to the missions and reductions in lifespan due to new diseases and the conditions of mission life (9, 31–33). The broader genetic context inferred for the three sets of individuals deepens understanding of Indigenous population history of California and the San Francisco Bay Area.

Results

Community Engagement. Large-scale infrastructure construction led to the excavation of two Ohlone villages, *Sii Tiáupentak* (CA-ALA-565/H) and *Rummei Ta Kuččuwiš Tiprectak* (CA-ALA-704/H), in Sunol, CA (see *Archaeological Investigation*). Far Western Anthropological Research Group completed the excavations in partnership with the Tribe, with community members participating in all aspects of fieldwork as well as being the primary excavators of all burials.

The genomics section of the project began in 2016 after Tribal Council requested and approved a study design for the

endeavor. The study design included community-based methods (34–36). After the project began, members of the research team visited the sites and met with Tribal Council and community members multiple times to have discussions on the latest results of the project, safeguards to be used for the data generated in the project, and thoughts on paths forward for the study. During the time period of the COVID-19 pandemic, the research team met virtually with Tribal Council and community members. Prior to the start of the project, members of the Tribe attended the Summer Internship for Indigenous Peoples in Genomics program in 2011 and 2013 to learn about the latest genomic analyses and about topics in the ethical, legal, and social implications of genomics research with Indigenous communities. Importantly, members of the Muwekma Ohlone tribe contributed to manuscripts and news stories published or disseminated about the project.

Archaeological Investigation. *Sii Tiáupentak* (CA-ALA-565/H) and *Rummei Ta Kuččuwiš Tiprectak* (CA-ALA-704/H) are both ancestral Native American Ohlone settlements situated in an open valley of the southeast San Francisco Bay region, central California, USA (Fig. 1). Modern development for large-scale infrastructure construction necessitated that substantive archaeological excavations be conducted at both sites. Archaeological mitigation of construction impacts to these archaeological sites, including the identification, excavation, analysis and reporting of human remains, strictly conformed to all state and local laws and regulations.

The Muwekma Ohlone tribe was appointed Most Likely Descendant Tribe for the project by the state and, in 2015, prior to the development of the research design for archaeological investigations, recommended detailed analysis, including paleogenomics, of all ancestral remains that may be encountered. All research designs, analytical studies of ancestral remains, and reports were reviewed and approved by tribal leadership, and the Tribe partnered with the research team to conduct these investigations.

Sii Tiáupentak (“Place of the Water Round House Site”) is a large (2.8 ha/6.9 acres), intensively occupied sedentary village consisting of a thick deposit of cultural material creating a low, anthropogenic mound, along with an associated cemetery (27). Archaeological investigation of 6.2% of the site recovered a wide range of cultural remains, including more than 13,000 artifacts, numerous food remains, 36 features, and 66 burials comprising 76 individuals. The site dates from 605 to 100 cal BP (1345 to 1850 CE), based on 129 radiocarbon dates from features, burials, and generalized site deposits. The site was founded prior to European contact and continued to be inhabited during early European coastal exploration starting in 1542 CE and through the region’s Spanish colonization, until the inhabitants were forced into the Spanish mission compounds (1776 to 1807). The site was also briefly reoccupied in the 1830s after the collapse of the Spanish empire. The eight individuals in this study include six females and two males of varied ages at death, and they span the full time range of occupation.

The nearby site of *Rummei Ta Kuččuwiš Tiprectak* (“Place of the Stream of the Lagoon Site”) has a similar size but is a multi-component settlement including a precolonial Indigenous occupation and a subsequent colonial Mexican and Early American period ranch complex in use from 1839 CE to the early 1900s. The Native American component of the site includes artifactual and other debris, 44 features, and 25 burials comprising 29 individuals. This component was inhabited from 2,440 to 175 cal BP (490 BCE to 1775 CE), based on 60 radiocarbon dates from generalized site deposits, features, and burials (26). The settlement was most intensive between 2,440 to 1,610 cal BP (88% of dates fall in this time span). The six individuals for which genomic analysis was attempted include four females and one male,

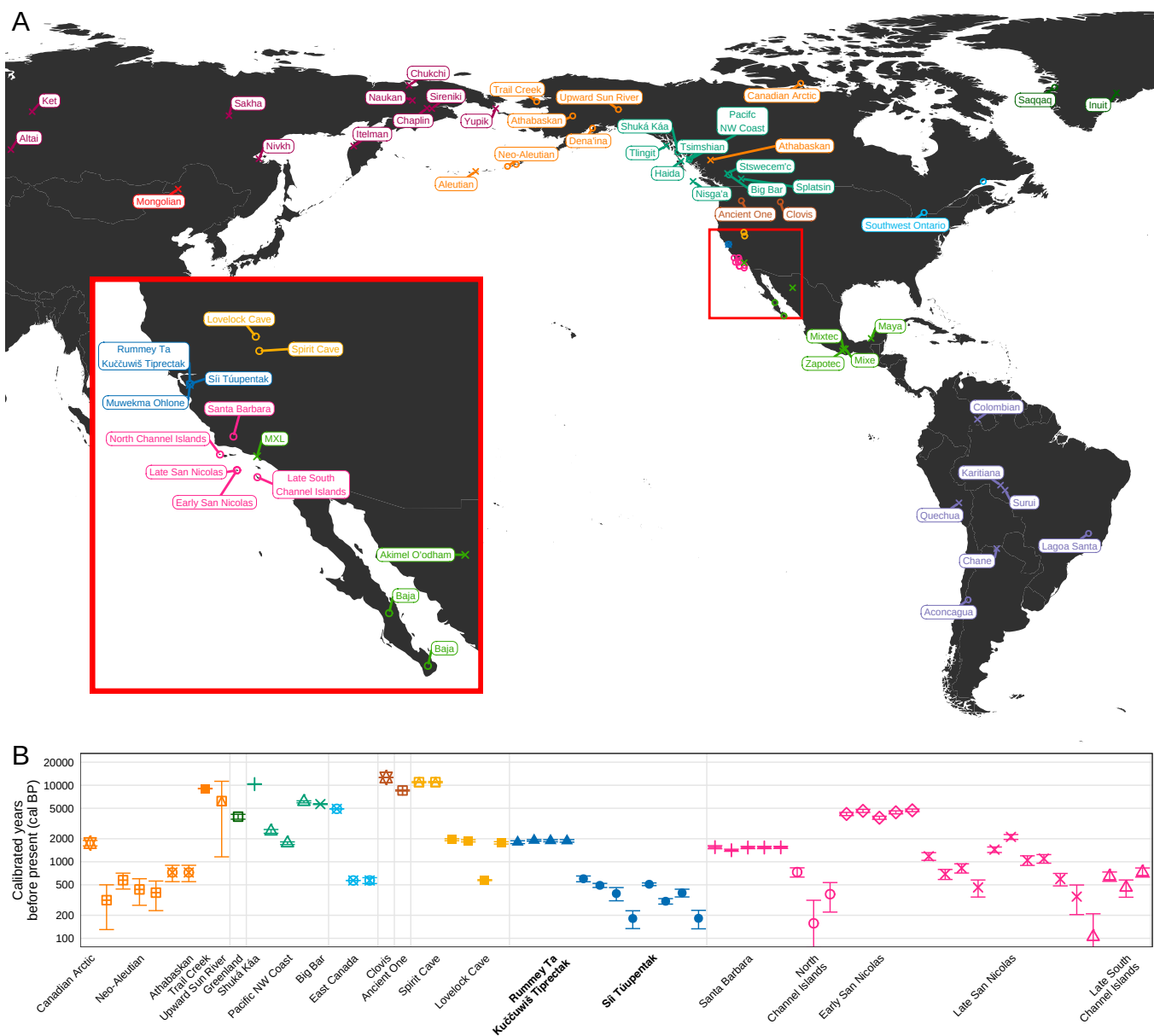


Fig. 1. Identifiers for ancient and present-day individuals used in this study. (A) Map of ancient and present-day individuals, colored by regional group. The inset shows the new individuals from the San Francisco Bay Area (blue) and the surrounding groups. (B) Dates of ancient individuals included in the dataset.

including two children and three adults, and date from 1,905 to 1,785 cal BP.

Genetic Dataset. We whole-genome sequenced 12 ancient individuals from two archaeological sites in the San Francisco Bay Area to a depth of 0.06 to 7.8× and mean 2.4×, after excluding two samples from the *Rummy Ta Kuččuwiš Tiprectak* site without sufficient genetic material (SI Appendix, Table S2 and Figs. S1–S3). Individuals from *Sii Túupentak* dated to 601 to 184 cal BP, and individuals from *Rummy Ta Kuččuwiš Tiprectak* dated to 1905 to 1826 cal BP. We also whole-genome sequenced eight present-day members of the Muwekma Ohlone tribe to high coverage, ranging from 18 to 25×. We assembled a dataset of relevant previously published samples. This dataset included 291 individuals from Asia, Europe, North America, and South America; it contained 68 ancient individuals and 223 modern individuals (SI Appendix, Table S3; Fig. 1A). After merging the

new and previously published individuals, the dataset we analyzed contains 311 individuals, 80 ancient individuals and 231 present-day individuals, typed for 474,317 single-nucleotide polymorphisms (SNPs; see SI Appendix, Methods).

Radiocarbon dates of the 12 newly sampled ancient individuals and those available for the previously published individuals are shown in Fig. 1B. Focusing on the ancient individuals from Nevada and California, we see that the dates fall into approximately three periods. The oldest group, from >4,000 cal BP, includes the individuals from Spirit Cave and those labeled Early San Nicolas. An intermediate group with ages between 2,000 to 1,500 cal BP includes the Lovelock Cave, *Rummy Ta Kuččuwiš Tiprectak*, and Santa Barbara groups. The most recent set includes individuals from *Sii Túupentak*, North Channel Islands (in this study, San Miguel and Santa Cruz), Late San Nicolas, and South Channel Islands (San Clemente and Santa Catalina), mostly with dates <1,000 cal BP.

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Overview of Data Analysis. Using the sample of 311 present-day and ancient individuals, we performed principal components analysis (PCA) and model-based clustering analysis to identify genetic relationships among previously reported individuals, the newly sampled ancient individuals, and the present-day Muwekma Ohlone individuals. We then restricted attention to a subset of 165 individuals with ancestry relevant to the new individuals, and repeated the analysis, also analyzing identity-by-state (IBS) segment sharing (*SI Appendix, Table S4*). Whereas the PCA and model-based clustering analyses use the genotypes of the 474,317 SNPs directly, in order to identify IBS segments, we imputed genotypes from the ancient samples across the whole genome (*Materials and Methods*). In interpreting the results of the various analyses, we considered the relationships of the 12 newly sampled ancient individuals and eight present-day Muwekma Ohlone individuals to other individuals, as well as to each other.

The San Francisco Bay Area Individuals in the Context of Native American Genetic Diversity. First, using PCA and unsupervised model-based clustering, we explore the relationship between the San Francisco Bay Area individuals and previously published ancient and present-day individuals from surrounding regions. Fig. 2A shows a PCA plot of 311 individuals. European individuals cluster in the lower right corner of the plot, and the northernmost populations from Siberia, Alaska, and Greenland appear at the top of the figure. The lower left corner contains a cluster of individuals from California, Nevada, Mexico, and Central and South America.

Clines are visible between these three corners of the plot. Three clines connect the left edge of the plot to the right corner of Europeans. Several Siberian individuals are placed along the upper right edge, a line of Pacific Northwest individuals connects the center of the left edge to the right corner, and a line of individuals from Mexico connects the lower left corner to the corner containing Europeans. These clines appear to reflect varying European admixture that aligns with principal component 1 (PC1). Present-day members of the Muwekma Ohlone tribe, who have a known history of admixture with European Americans, Mexicans, and Mexican Americans, fall along the lower edge, with variable values for PC1.

Focusing on the cluster of individuals from California, Nevada, Mexico, and South America, Fig. 2B enlarges the lower left corner of Fig. 2A. In the enlarged view, individuals

from South America appear in the bottom left corner, anchoring a south-to-north cline along PC2. At the top of Fig. 2B, the individuals from Lovelock Cave in Nevada, who are close in age to those from the *Rumney Ta Kuččuwiš Tiprectak* and Santa Barbara sites (Fig. 1B), fall above the main cluster. The ancient individuals from the San Francisco Bay Area cluster with the ancient individuals from Southern California along the left edge of Fig. 2B.

Model-based unsupervised clustering for $K = 10$ clusters, performed using NGSadm, appears in Fig. 3. From Asia to South America, we first observe a cluster that appears largely in Mongolia and Siberia (dark blue) and a cluster that appears in Siberia, Greenland, and Alaska (light blue). Two clusters appear primarily in the Pacific Northwest and Alaska, with one centered on Stswece'm'c and Splitsin (light green) and the other appearing in most other populations from the region (dark green). A sample of Europeans is assigned to a single cluster, which is seen in many populations in the plot (red). Among the remaining five clusters, three are centered on specific populations: Akimel O'odham (formerly termed Pima; light orange), Karitiana (pink), and Surui (light purple). One is centered on native populations of Mexico and South America (dark orange).

The ancient individuals from the San Francisco Bay Area and Southern California both have majority membership in the same component (purple). As in the PCA, these two groups cluster together. We also observe, as seen by Scheib et al. (15), that the ancient individuals from Southern California separate into two groups: Individuals from San Nicolas and the Southern Channel Islands have membership primarily in a single component (purple), whereas individuals from Santa Barbara and the North Channel Islands have more substantial membership in a second component as well (orange). As was seen by Moreno-Mayar et al. (16), we find that the individuals from Lovelock Cave in Nevada have noticeable membership in a component shared with those from the Pacific Northwest (light green, dark green), a similar signal to their separation in the PCA plot in Fig. 2B. The present-day Muwekma Ohlone are known to have European, Mexican, and Ohlone genealogical ancestors, consistent with the appearance of the red, orange, and purple components observed in these individuals.

Population Structure Within Western North American Populations. Next, we consider a subset of 165 individuals to more closely

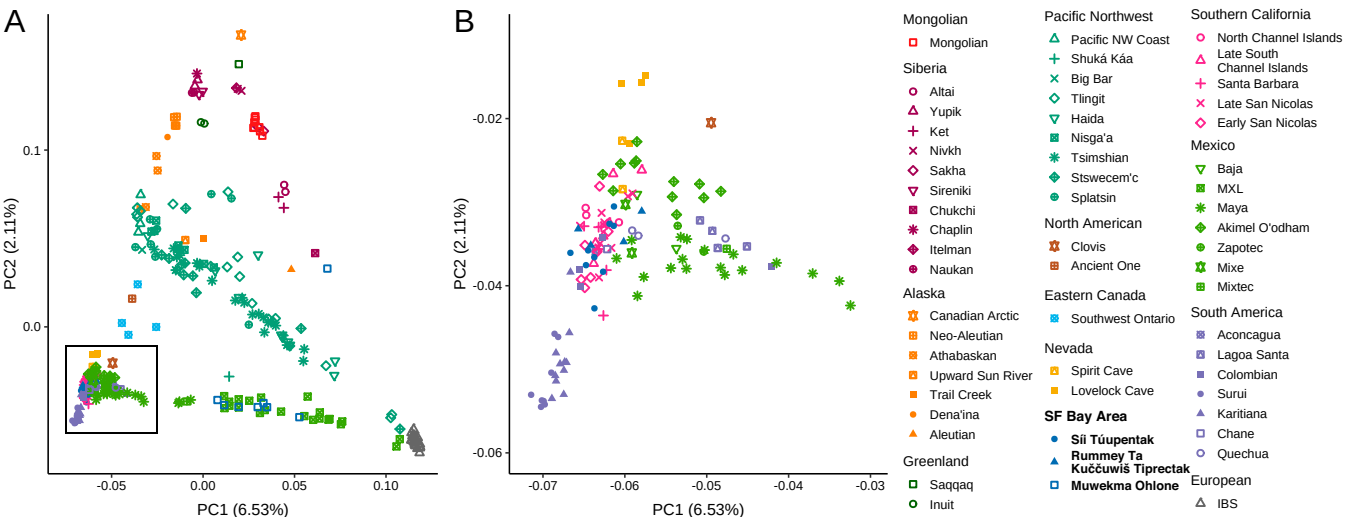


Fig. 2. PCA of all ancient and present-day individuals. (A) PCA of 311 individuals in the full dataset, including 231 modern and 80 ancient individuals. (B) An enlarged view of the cluster in the Bottom Left Corner of A.

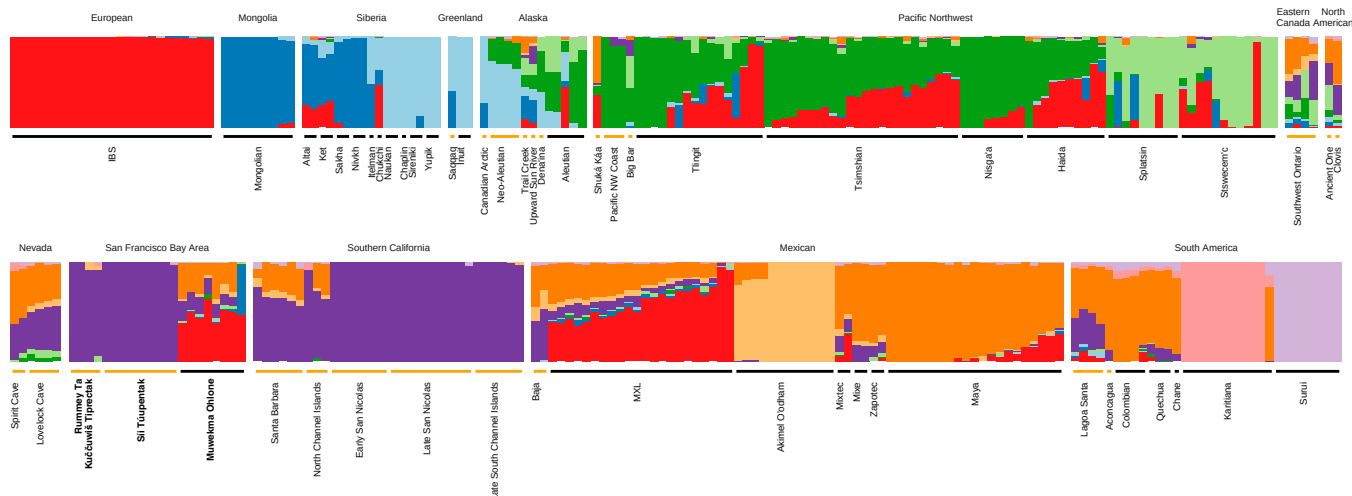


Fig. 3. Model-based clustering of all 311 ancient and present-day individuals, with $K = 10$ clusters. The results represent a summary of 10 independent runs of unsupervised clustering. Each of the 10 clusters is represented by a color, and each individual is represented by a vertical bar. To aid interpretation, clustering results from a unified analysis are depicted over two rows. Ancient individuals are denoted by an orange horizontal line below the plot, and present-day individuals are denoted by a black horizontal line.

examine population structure within western North America. For this subset, we perform PCA, model-based clustering, and analysis of IBS segment sharing.

Fig. 4A shows the first two principal components. The ancient individuals from San Nicolas and the South Channel Islands cluster are in the top left corner, with the remaining Southern California individuals from Santa Barbara and the North Channel Islands appearing below them along the left side. The European individuals cluster on the right side. Most remaining individuals cluster in the bottom left corner, including those from *Rumney Ta Kuččuwiš Tiprectak* and *Sii Túupentak*. Muwekma Ohlone and MXL (Mexican in Los Angeles) individuals fall along a cline connecting the lower left corner to the cluster containing Europeans, the same cline observed in Fig. 2A.

We plot PC2 with PC3 in Fig. 4B. In this plot, the individuals from *Rumney Ta Kuččuwiš Tiprectak* and *Sii Túupentak* separate from the large cluster that appeared in the lower left corner of Fig. 4A. In the top left corner, the individuals from

Rumney Ta Kuččuwiš Tiprectak and *Sii Túupentak* cluster together. Populations placed near these individuals in Fig. 4A, including several Indigenous populations from Mexico, appear in the center and lower left corner.

Inferences with unsupervised model-based clustering for $K = 4$ and 5 appear in Fig. 5. At $K = 4$, we observe four clusters that are largely similar to four of the clusters seen in the $K = 10$ analysis shown for the larger dataset in Fig. 3. The European individuals are placed in one cluster (red), the Akimel O'odham individuals are assigned primarily to a second cluster (light orange), a third cluster is centered on individuals from Mexico (dark orange), and a fourth is centered on the ancient individuals from California (purple).

Increasing K to 5 splits the purple cluster into two, with the purple cluster remaining centered on the individuals from Southern California and the new blue cluster centered on the ancient individuals from the San Francisco Bay Area. A small amount of membership is seen in this blue cluster in other populations, including the individuals from Santa Barbara and the

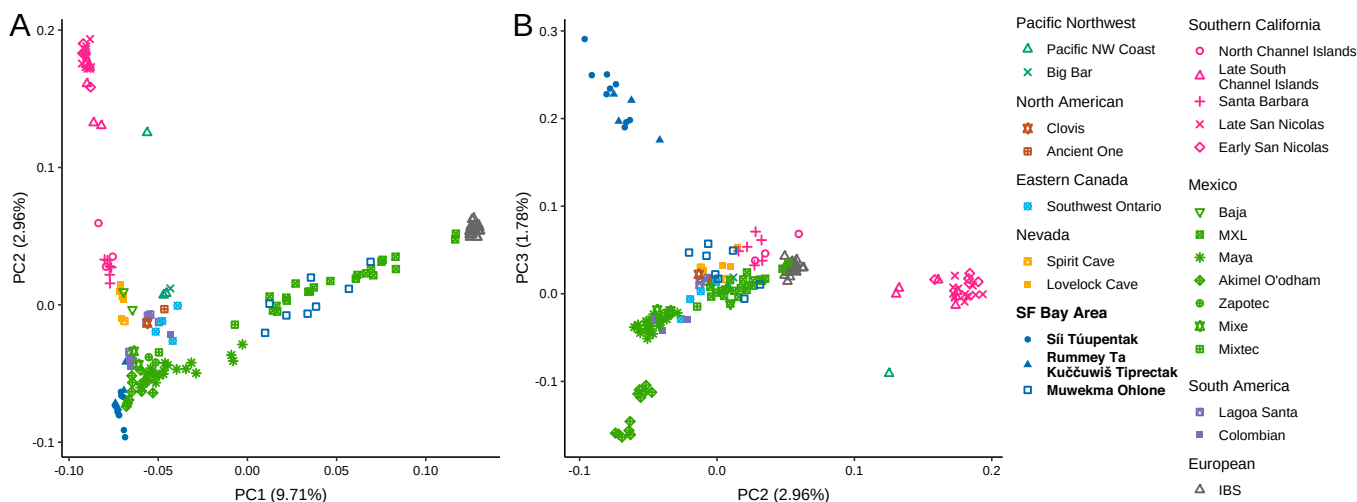


Fig. 4. PCA of a subset of ancient and present-day individuals, considering 165 samples with ancestry relevant to newly sampled individuals from the San Francisco Bay Area. (A) PCs 1 and 2. (B) PCs 2 and 3.

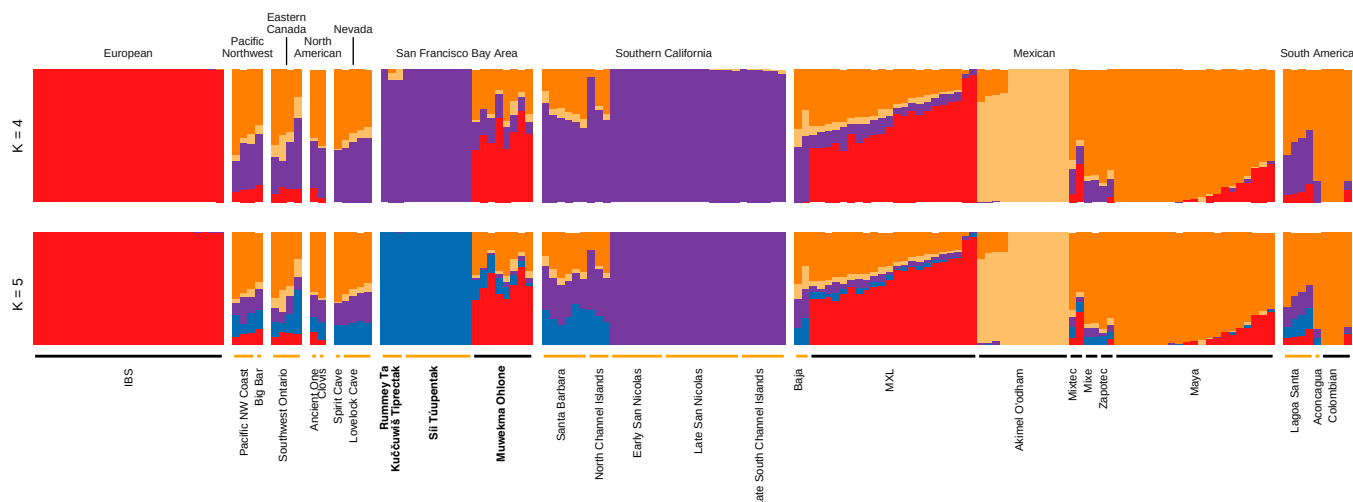


Fig. 5. Model-based clustering of a subset of ancient and present-day individuals, considering 165 samples with ancestry relevant to newly sampled individuals from the San Francisco Bay Area. Separately for $K = 4$ and $K = 5$, the results represent a summary of 10 independent runs of unsupervised clustering. Coloring is the same as described in Fig. 3.

North Channel Islands, the Spirit Cave and Lovelock Cave samples, the North American samples, the Lagoa Santa sample from South America, and the modern Muwekma Ohlone.

To further understand population structure in western North America, we evaluate IBS genomic sharing between pairs of individuals, focusing on 53 ancient individuals from Nevada, California, and Mexico and employing genome-wide imputed genotypes (Fig. 6). The individuals from the oldest site, Spirit Cave in Nevada, share segments broadly, potentially reflecting ancestral haplotype sharing with many more recent individuals because of their increased ages. To some extent, a similar pattern is seen for individuals from the next oldest site, Early San Nicolas.

The highest levels of IBS sharing occur along the diagonal between individuals from the same population. The analysis

suggests four clusters—Nevada, San Francisco Bay Area, North Channel Islands together with Santa Barbara, and South Channel Islands—for which pairs within a cluster possess elevated IBS sharing relative to pairs from distinct clusters. Segment sharing decreases for pairs from distinct clusters, with the exception of the sharing between individuals from the North Channel Islands and the Late South Channel Islands, who are close in age.

The clustered pattern of IBS sharing mirrors observations seen in Figs. 4 and 5. Because the highest levels of sharing occur within these population clusters and because the individuals in a cluster have a range of ages, the IBS sharing within each cluster suggests population continuity over space and over time, in the sense that subsequent populations possess ancestry in prior populations. Focusing on the San Francisco Bay Area, the elevated sharing between the individuals from the older *Rummy Ta Kuččuwiš Tiprectak* site and the more recent *Sii Túupentak* site and the relatively low sharing of these individuals to others suggest a notable level of genetic continuity in time between the two sites and that at both of the time periods they represent, their populations possessed distinct ancestry from contemporaneous individuals in Nevada and Southern California.

Present-day Muwekma Ohlone and Ancient *Rummy Ta Kuččuwiš Tiprectak* and *Sii Túupentak* Individuals. Present-day members of the Muwekma Ohlone tribe are known to possess European, Mexican, and Ohlone genealogical ancestors, and we observe this history of admixture in many of our analyses. In Figs. 24 and 44, the Muwekma Ohlone lie along a cline on PC1, reflecting European and Mexican admixture. In Figs. 3 and 5, the largest cluster memberships for the Muwekma Ohlone appear in the cluster centered on the European individuals (red) and the cluster centered on Indigenous individuals from Mexico (dark orange).

Despite this signal of admixture, the analyses consistently suggest shared ancestry between the Muwekma Ohlone and the individuals from the *Rummy Ta Kuččuwiš Tiprectak* and *Sii Túupentak* sites. In Fig. 3 and in the analysis with $K = 4$ in Fig. 5, the Muwekma Ohlone share membership with the ancient individuals from California, both those from the San Francisco Bay Area and those from Southern California (purple). In Fig. 5, at $K = 5$, we also see that the cluster centered on the

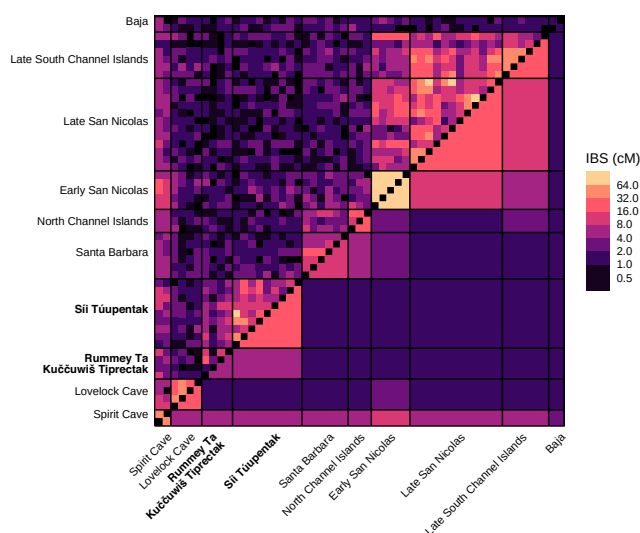


Fig. 6. Total pairwise IBS segment sharing for 53 ancient individuals from Nevada, California, and the Baja peninsula. The upper triangle of the matrix shows the total length of segments shared for pairs of individuals. The lower triangle shows mean pairwise values. In the triangularly shaped regions incident to the diagonal, the mean is taken across pairs within a population; rectangles off the diagonal show means across pairs, one from one population and one from another population.

individuals from *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* is visible in the Muwekma Ohlone (blue).

By excluding membership corresponding to European admixture, we can compare the shared membership that the Muwekma Ohlone possess with the cluster centered on *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* to corresponding shared membership that other modern populations possess with this cluster. In Fig. 7, for various modern populations, we consider the relative proportion that appears in the blue component in the $K = 5$ plot in Fig. 5 in modern individuals, as a fraction of total membership excluding the red component centered on the European individuals. This analysis reveals that the Muwekma Ohlone possess a larger relative proportion of the blue component than do other populations; Mann-Whitney tests for the eight Muwekma Ohlone produce $P = 5.6 \times 10^{-4}$ for a comparison with 22 MXL individuals, $P = 3.0 \times 10^{-5}$ with 12 Akimel O'odham individuals, and $P = 4.0 \times 10^{-6}$ with 21 Maya individuals (with small sample sizes of two individuals each, $P = 0.09$ with Mixtec, $P = 0.02$ with Mixe, and $P = 0.04$ with Zapotec). Hence, despite the admixture history of the Muwekma Ohlone, so that the population possesses multiple membership components, one membership component shared between the Muwekma Ohlone and the ancient individuals from the *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* sites—a component suggestive of a partial shared ancestry—can be observed. This sharing between the present-day and ancient individuals is further supported in additional tests using the f_4 statistic, by which greater similarity is observed between the Muwekma Ohlone and the *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* sites than between the Muwekma Ohlone and ancient individuals from surrounding regions (SI Appendix, Table S5).

Discussion

In this study, we sequenced genomes of 12 ancient individuals from two archaeological sites in the San Francisco Bay Area and eight present-day members of the Muwekma Ohlone tribe. To study population structure within California and western North America more broadly, we compared these individuals to previously published genomes of ancient and present-day

Indigenous individuals. We also compared the 12 ancient individuals and eight modern individuals from the San Francisco Bay Area.

Continuity of Ancient and Modern Populations in the San Francisco Bay Area. We first performed analyses of the newly sampled ancient individual genomes with a broad sample containing individuals from North America, South America, Europe, and Siberia. In these analyses, the ancient individuals from the *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* sites clustered most closely with the ancient individuals from Southern California. Using PCA, the individuals from these groups overlap (Fig. 2), and with model-based clustering, we see that a shared cluster is centered on them (Fig. 3, purple).

Next, we focused our analysis on a subset of populations with ancestry relevant to the newly sequenced ancient individuals. In finer-scale analysis, the ancient individuals from the San Francisco Bay Area and Southern California, who cluster together in the larger dataset, are split into separate clusters. With PCA, the individuals from *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* cluster together (Fig. 4), and with model-based clustering, at $K = 5$, a cluster is centered on the ancient individuals from the San Francisco Bay Area (Fig. 5, blue). In an analysis of IBS sharing, we find elevated sharing among the ancient San Francisco Bay Area individuals from the two archaeological sites relative to the sharing with individuals from Mexico, Nevada, and Southern California.

Finally, we considered the relationship between the ancient individuals from *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* and their relationship to the present-day Muwekma Ohlone. Although the present-day individuals also possess recent European and Mexican ancestry, we find that they also share ancestry with the ancient individuals. In particular, considering fractions of individual genomes estimated to have Indigenous ancestry, we found in Fig. 7 that the Muwekma Ohlone share a relatively high proportion of a cluster shared with the ancient individuals from the San Francisco Bay Area (blue cluster in Fig. 5).

The shared ancestry components provide support for genetic continuity between the individuals from the *Rummey Ta Kuččuwiš Tiprectak* and *Sii Tüupentak* archaeological sites and between the two sites and the present-day Muwekma Ohlone. This continuity, in the sense of a possible genealogical descent relationship connecting the more ancient and more recent populations, would then extend from the *Rummey Ta Kuččuwiš Tiprectak* individuals, dated to 1905 to 1826 cal BP, through the *Sii Tüupentak* individuals, who date to 601 to 184 cal BP, to current tribal members. The two archaeological sites represent substantially longer time periods than the dates associated with the particular individuals sampled; *Rummey Ta Kuččuwiš Tiprectak* was inhabited 2440 to 175 cal BP, most actively during 2440 to 1610 cal BP, and *Sii Tüupentak* spans 605 to 100 cal BP. The genetic connections between the two archaeological sites and between the sites and the present-day Muwekma Ohlone individuals suggest that the present-day Muwekma Ohlone share continuity with peoples who have inhabited the San Francisco Bay Area for at least two millennia, since the genetic sampling period for *Rummey Ta Kuččuwiš Tiprectak*, 1905 to 1826 cal BP, and potentially to the earliest dates of the site, around 2440 cal BP. These results suggest that models in which ancestral Ohlone populations are posited to have migrated to the region 1,500 to 1,000 y ago (3, 37, 38) provide underestimates of the continuity of the population. They are compatible with reconstructions that posit Ohlone population continuity in this portion of the San Francisco Bay Area extending back to 2,500 y ago or possibly earlier (39–41).

We note that the population continuity we have observed between the archaeological sites and the current Muwekma

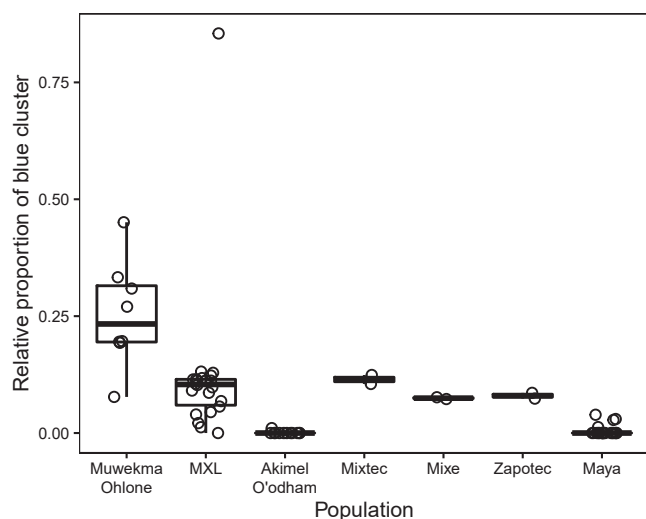


Fig. 7. Membership in the blue cluster in the $K = 5$ cluster analysis in Fig. 5, divided by one minus membership in the red cluster, for present-day populations from California and Mexico. For each individual, the proportion is calculated as the membership fraction in the blue cluster divided by the total fraction of membership in the blue, purple, light orange, and dark orange clusters. Individual values and boxplots are shown.

Ohlone takes the form of a continuity of genetic ancestry components and a noteworthy sharing of genomic segments. This form of genetic continuity does not provide formal evidence that the modern individuals are directly descended from the individuals studied from these archaeological sites, but it is compatible with a view that the modern population is descended from those in the archaeological sites or from genetically similar contemporaneous populations. That this continuity is detectable is perhaps surprising, considering the extreme disruption and increase in deaths of the Ohlone caused by Spanish occupation. Mission records document substantial intermixture with neighboring non-Ohlone groups that began after other tribal groups (notably Coast Miwok, Bay Miwok, Plains Miwok, and Yokuts) from neighboring areas were brought to the same missions because of the rapid decline of Bay Area Ohlone mission populations (9, 42). As a result, for example, some descendants of marriages between Ohlone and non-Ohlone individuals identified culturally as Ohlone, spoke the language, and maintained key cultural traditions (28, 30, 43). Genetic continuity with the archaeological sites is detectable despite this intermixture of Indigenous populations from locations relatively distant from the sites.

Interpretations in Relation to the Penutian Language Family. Attempts to explain the complex mosaic of California languages and language families at European contact have given primacy to historical linguistic reconstructions that posit successive precontact migrations and displacements of various language groups and approximate timings of language divergence within families (44–46). Archaeologists have then looked for changes in the precontact archaeological record that would test these models. As a result, precontact California history is often framed as possessing linguistic and archaeological cultural concordance (40, 47). With respect to the San Francisco Bay Area, this view holds that speakers of Hokan languages initially occupied central California. Subsequently, Hokan speakers were then pushed to geographic peripheries by Penutian speakers entering California in a series of migrations and inhabiting the Central Valley and Bay Area (3, 13, 40, 48). Proto-Penutian speakers in California are hypothesized to have originated in the Great Basin or possibly on the Columbian Plateau. This hypothesis has been based on historical linguistic reconstructions, archaeological investigations, and recent mitochondrial DNA research (3, 40, 49)—notably including similarities in material culture (projectile point types, stone pipes, extensive bone tool industry with distinctive types, and basketry techniques) between the Lovelock Culture of western Nevada and the appearance of the Windmiller Pattern in central California during the Late Holocene (40, 48, 50). The Ohlone language falls within the geographically extensive Penutian language family, most closely related to the neighboring Miwok and Yokuts languages (44–48).

The four ancient Lovelock Cave individuals are clustered to some extent with ancient individuals from the San Francisco Bay Area and Southern California (Fig. 2). They also share two ancestry clusters with ancient and modern individuals from the Pacific Northwest (Fig. 3, light green, dark green). Four ancient Pacific Northwest Coast individuals, along with the ancient Big Bar individual also from the Pacific Northwest, possess a small amount of membership in a cluster shared with the ancient individuals from Nevada and California (Fig. 3, purple). These patterns are compatible with a view that the Lovelock Cave individuals share similarities with Penutian groups that spread both into the Pacific Northwest and into California (48). In this view, the shared ancestry component could represent a signature of a spread of the Penutian languages, with the Lovelock Cave individuals and the Pacific Northwest Coast and Big Bar individuals both descended from ancestors in the Great Basin region (Fig. 3, purple).

Despite this similarity to the ancient individuals from Lovelock Cave, both the ancient San Francisco Bay Area individuals and the present-day Muwekma Ohlone individuals clustered more closely with ancient individuals from Southern California, where the Penutian language family is absent, than with the (possibly Penutian-speaking) Lovelock Cave individuals associated with Lovelock Culture. Because our analyses do not cluster individuals associated with putative regions of Penutian speakers together (e.g., Lovelock Cave, Pacific Northwest, San Francisco Bay Area), we can conclude that if Penutian languages did spread from the Great Basin into California, then either the spread might have involved linguistic rather than demic diffusion or a shared genetic signal of an initial migration has been eroded by subsequent demographic processes. In both scenarios, genetic and linguistic histories in California are not coupled, so that a history of the spread of cultures in the region is unlikely to always align with the spread of languages. This perspective is consistent with the challenges archaeologists have noted in trying to link historical linguistic models of migrations of populations speaking specific languages with clear changes in the archaeological record, resulting in widely divergent suggestions for the timing of these migration events (13, 14, 51).

We note that in Southern California, we observed a consistent separation of South Channel Islands and San Nicolas individuals from individuals from the North Channel Islands and Santa Barbara, amplifying a pattern visible in figure S11 in Scheib et al. of ref. 15. The ancient individuals from Santa Barbara and the North Channel Islands cluster with the ancient San Francisco Bay Area samples, separating from the individuals from the South Channel Islands, including the individuals from San Nicolas Island. This separation accords with a language boundary at the time of European contact: Individuals from Santa Barbara and the North Channel Islands spoke Chumash languages (considered either part of the Hokan group or an ancient linguistic isolate), whereas individuals from the South Channel Islands (plus San Nicolas) spoke Takic languages of the Uto-Aztecan group (45, 46). Takic language speakers are hypothesized to have migrated from the Great Basin into Southern California during the last 5,000 y, with uncertain timing of their arrival on the coast and the South Channel Islands (1, 40, 45, 52). The genetic clustering of Early San Nicolas Island individuals (dated from 5,000 to 4,000 cal BP) with Late San Nicolas Island individuals (dated to 2,000 cal BP or later) but separate from individuals from the North Channel Islands and Santa Barbara suggests population continuity on San Nicolas during this time span and is compatible with the reconstruction that posits an early arrival of Takic language speakers on San Nicolas.

Methodological Considerations. Because of the poor read quality and low sequencing depth for ancient samples, analysis of ancient DNA has primarily made use of haploid genomes in which the haplotype phase has been lost. However, the augmentation of ancient samples with modern reference genomes is increasingly making it possible to perform genotype imputation and haplotype phasing in ancient samples (53). Previous studies have used imputed diploid genotypes from ancient individuals to study demographic history and estimate phenotypes in ancient individuals (54–58). Our work is one of relatively few studies that use imputed genotypes in ancient samples to evaluate haplotype sharing within and between ancient and present-day individuals (55–57).

In this study, we encountered a scenario in which a modern population of interest to examine for genetic continuity with ancient populations possesses admixture components that are not informative about the relationships of interest. Such scenarios can be addressed by performing analyses that disregard those admixture components. In our scenario, we sought to

discern, within the component of genomic membership not assigned to European admixture, relative contributions of clusters associated with different Indigenous populations (Fig. 7). The signature of similarity between present-day Muwekma Ohlone and a cluster with considerable membership in the ancient San Francisco Bay Area samples and smaller signatures of other modern populations with this cluster suggests the potential of the approach in other comparisons of ancient populations to modern admixed populations.

Many ancient DNA studies in the Americas, and particularly those involving individuals from North America, have studied large-scale processes such as the initial peopling of the continents (19, 21, 22, 24) or subsequent major migration events (15, 16). As a result, enough ancient individuals have been sequenced to provide reference data for studies that focus on ancient genomics of a specific region, such as the Pacific Northwest (18) or the Caribbean (59, 60). Our study of ancient and present-day individuals from the San Francisco Bay Area contributes an example of the use of regionally focused ancient genomics to demonstrate how analysis of ancient and modern individuals can reveal changes in local population structure over time.

An important component of this study has been its community engagement process and coproduction of knowledge as part of increasing interest in partnerships between researchers and Indigenous communities to conduct genetic research (34, 36, 61)—including genetic research that involves Indigenous ancestors (35, 62). A distinctive feature in this case has been the participation of a tribal group in the initiative to pursue the project, in the selection of research questions, in archaeological excavation and ancient genomics involving sites in their historical lands, and in present-day genomic analysis with current tribal members. Hence, in addition to its scientific conclusions, the study provides a contribution to advancing community engagement models in Indigenous genomics. The study reaffirms the Muwekma Ohlone's deep-time ties to the area, providing evidence that disagrees with linguistic and archaeological reconstructions positing that the Ohlone are late migrants to the region (37, 38). The results have also generated interest from tribal leadership in carrying out similar genomic investigations on ancestral remains from older sites in order to better document and understand the time depth of Ohlone population-genetic continuity in the San Francisco Bay region.

Materials and Methods

Ethics Approvals. The study proceeded with significant community engagement at all stages (*Community Engagement*), under Institutional Review Board protocol no. 10538 from the University of Illinois at Urbana-Champaign, and it included informed consent from present-day members of the Muwekma

Ohlone tribe. In addition, the Muwekma Ohlone Tribal Council also approved the study, including the genomic analysis of community members and ancestral remains. The Tribal Council was consulted on the results and approved the manuscript for disseminating the study.

Principal Components Analysis. We performed PCA with both the full set of 311 and the subset of 165 individuals, employing all 474,317 SNPs. For both datasets, we first estimated the covariance matrix of individual genotype vectors from genotype likelihoods (*SI Appendix, Methods*). We then used the eigen function in R to calculate eigenvectors, corresponding to principal components, and eigenvalues.

Model-Based Clustering. We used NGSadmix (63) to perform unsupervised model-based clustering on genotype likelihoods from the 85,659 SNPs that remained after LD pruning. For each tested number of clusters K , we performed the clustering 10 independent times, running NGSadmix with parameters $-\text{minMaf } 0.05$, $-\text{maxiter } 10,000$, and $-\text{tol } 0.000001$. We also included the parameter $-\text{minInd } 35$ for the full dataset of 311 individuals and $-\text{minInd } 15$ for the subset of 165 individuals. To evaluate the clustering solutions inferred by NGSadmix, we ran CLUMPP (64) with parameters DATATYPE 0, M 2, W 0, S 2, and GREEDY_OPTION 2, and REPEATS 1000. Next, following Verdu et al. (65), we clustered the runs based on pairwise G' values greater than 0.9. For the majority cluster of each K value, which contained the most runs, we reran CLUMPP with the same parameters to produce an averaged clustering solution for display in figures. Preferred choices for the value of K were obtained by use of evalAdmix (ref. 66; *SI Appendix, Methods and Fig. S4*).

IBS Segment Sharing. We identified IBS segments between pairs of samples in four steps (*SI Appendix, Fig. S5*). First, we estimated genotype likelihoods in the ancient and modern samples with ANGSD (67). Second, we phased and imputed genotypes from the genotype likelihoods with GLIMPSE (68). Third, we called IBS segments from the phased genotypes with hap-IBD (69). Fourth, in modern admixed individuals, we performed local ancestry assignment and identified IBS segments that lie on the Indigenous background, considering comparisons between modern samples and other modern samples, and between modern samples and ancient samples. This pipeline generated a list of IBS segments shared between ancient and modern individuals, restricting attention to the Indigenous-origin segments of the modern genomes. Further details appear in the *SI Appendix, Methods and Fig. S6*.

Data Availability. Genomic data from previous studies have been obtained from public sources, as described in the supplementary material. The Muwekma Ohlone Tribe will review requests for genomic data on tribal members and associated archaeological sites before access can be granted. Please send requests to the corresponding authors.

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Community-Based Archaeology at *Sii Túupentak* in the San Francisco Bay Area: Integrated Perspectives on Collaborative Research at a Major Protohistoric Native American Settlement

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This paper presents an example of a community-based archaeological study in the southeast San Francisco Bay Area by the Muwekma Ohlone Tribe, joined by an interdisciplinary team of researchers. The nature and breadth of this cooperative effort is presented, highlighting the Tribe's perspective on project goals, the nature of their involvement, and their initiative in addressing ancestral remains and funerary regalia. This includes the questions being asked of the archaeological record, how these interests and goals were operationalized within the context of a CRM-driven development project, and how the results will be contextualized to the broader community. Project insights are summarized, with particular emphasis on the lifeways of Sii Túupentak's ancestral Ohlone inhabitants during the four centuries prior to forced relocation in 1805 due to Spanish colonization. The discussion touches on site setting, age, and structure; the subsistence economy; the lived lives and mortuary practices of the ancestors; sociopolitical implications of regional trade; and the wider implications of the study.

COLLABORATIVE RESEARCH BETWEEN NATIVE American tribes and archaeologists has increased in recent years. This paper presents an example of a community-based archaeological study at *Sii Túupentak* ("Place of the Water Roundhouse Site," CA-ALA-565/H), an ancestral heritage Native American Ohlone village and associated cemetery in the southeast San Francisco Bay Area (Fig. 1). This is a collaborative study by the Muwekma Ohlone Tribe of the San Francisco Bay Area, joined by an interdisciplinary team of archaeological

researchers led by the Far Western Anthropological Research Group. The nature and breadth of this cooperative effort is presented, highlighting the Tribe's perspective on overall project goals, the nature of their involvement throughout the study, and their initiative in addressing ancestral remains and funerary regalia. This includes consideration of the questions being asked of the archaeological record, how these interests and goals were operationalized within the context of a cultural resources management (CRM) driven development project, the key



Figure 1. Regional map showing project location.

role played by the project proponents and the regulatory agency, and how the results are being contextualized to the broader San Francisco Bay Area community.

As requested by the Tribe prior to the start of the project, detailed archaeometric analyses were carried out on the ancestral Ohlone individuals recovered from burial excavations to gain new insights into community trends, social and ideological complexity, and the lives of these individuals. Novel project insights are emphasized, with particular emphasis on the lifeways of *Sii Túupentak's* ancestral Ohlone inhabitants during the four centuries prior to forced relocation in 1805 due to Spanish colonization. The site setting, age, and structure, and its subsistence economy are presented initially. This is followed by consideration of the lived lives and mortuary practices of the ancestors, the sociopolitical implications of regional trade prior to and during Spanish colonization, and the broader implications of the study.

REGIONAL BACKGROUND

California is well-known for being one of the geographical regions of North America with extremely high indigenous cultural and linguistic diversity (Golla 2011; Heizer 1978; Kroeber 1925). In the late 1700s Native Californians spoke more than 78 languages within six major linguistic families (Golla 2011; Hinton 1994). California also supported large pre-colonial populations with the highest population density in North America, owing in large part to its high coastal and terrestrial ecological productivity (Coddington and Jones 2013; Kroeber 1939; Ubelaker 1992).

The San Francisco Bay Area notably had some of the highest regional population densities in California (along with the Lower Sacramento Valley and the Santa Barbara area) at the start of European colonization (Cook 1976). Based on population reconstructions using Spanish Mission baptismal recruitment records, more than 15,000 Native Americans from five distinct language

groups were residing in 45 territorial communities (land-controlling autonomous polities) within 20 kilometers (km.) of the Bay (Byrd et al. 2017, 2018; Milliken 1995, 2010). Native American groups residing in the San Francisco Bay Area included the Ohlone in the southern and central portion; Coast Miwok in the northwest portion; and Bay Miwok, Plains Miwok, Patwin, and Delta Yokuts in the eastern Bay-Delta area (Johnson 1978; Kelly 1978; Kroeber 1925; Levy 1978a, 1978b; Wallace 1978). All lived in villages with well-defined tribal territories that were considerably smaller than the potential daily foraging range, and they interacted and traded widely with nearby settlements (Byrd et al. 2020a).

The site of *Sīi Túupentak* is situated near Sunol in the southeast San Francisco Bay Area within the Causen Ohlone territorial community (Milliken 1995, 2006). As such it lies within the unceded lands of the Ohlone, who at the time of Spanish colonization occupied ~4.3 million acres from San Francisco to Monterey and from the coast to the upland edge of the Central Valley. The Ohlone population circa 1770 is estimated to have been at least 16,000 people living in 59 Territorial Communities (Milliken 2010). Between 1770 and 1797, Spanish colonizers situated six California missions in Ohlone territory owing to the high indigenous population density.

Extensive investigation of the San Francisco Bay's numerous archaeological sites has produced a trans-Holocene record, revealing that intensive sedentary or semi-sedentary habitation of complex hunter-gatherers extends back more than 5,000 years (Byrd et al. 2017; Lightfoot 1997; Milliken et al. 2007). Regional population grew over the last 4,000 years, along with increasing social, political, and economic complexity. This resulted in an increasing reliance on more costly-to-acquire foods (including particular species of marine mammals, terrestrial mammals, birds, fish, and plants) indicative of resource intensification (Broughton 1999; Broughton et al. 2015; Whitaker and Byrd 2014; Wohlgenuth 2002). Active landscape management (including prescribed burning), territorial circumscription, and periodic upswings in inter-group violence are also indicated (Lightfoot et al. 2013; Milliken 2006; Schwitalla et al. 2014). It has also been asserted that non-egalitarian social structure and status ascription was widespread in the region (Bellifemine 1997; Hylkema 2002:258–261; Leventhal 1993; Luby 2004; Milliken et al. 2007),

particularly during the Late Period (post-685 calibrated years before present [cal B.P.]), although more nuanced perspectives have also been presented (Byrd and Rosenthal 2016).

Luby (1995) initially recorded and excavated *Sīi Túupentak* with a field school in 1993, noting that it was a significant Late Period/Contact-era village that may also include a Native American rancheria associated with the nearby circa-1840s Mexican-era Suñol Adobe complex. It is also probably the Ohlone village described by Fages and Crespi when they traversed the Sunol Valley (which they named Santa Coleta, noting that it was an ideal setting for a mission) on April 2, 1772 Common Era (C.E.; 178 cal B.P.; Crespi 1927:300). More than a decade after Luby's work, plans for large-scale infrastructure construction by the San Francisco Public Utilities Commission (SFPUC) of a public outreach watershed interpretive center within the site boundaries required extensive archaeological investigations to be conducted at this large, ancestral Native American Ohlone settlement (Byrd et al. 2020a). Therefore, the current archaeological study provided the opportunity to better bridge the gap between pre-colonial and post-colonial Ohlone lifeways.

It should also be noted that additional large-scale infrastructure construction by the SFPUC led to the discovery and extensive data recovery of the archaeological site of *Rummey Ta Kuččuwiš Tiprectak* ("Place of the Stream of the Lagoon Site," CA-ALA-704/H) 400 meters to the northeast (Byrd et al. 2020b; Ross et al. 2020). This large, multicomponent settlement included a pre-colonial Indigenous occupation and a subsequent colonial Mexican and Early American period ranch complex (including remnants of the Suñol Adobe) in use from 1839 C.E. to the early 1900s. The Native American component was investigated by the same collaborative team that conducted the excavations and analysis at *Sīi Túupentak*, documenting numerous features and burials dating primarily from 2,440 to 1,610 cal B.P. (88% of the dates fall within this time span) along with sparser evidence of occupation between 1610 to 175 cal B.P. (Byrd et al. 2020b).

COLLABORATIVE ARCHAEOLOGY

Community-based or collaborative archeology falls within the broad category of public archaeology. There

is a long history of public archaeology and publications on this topic; in the U.S.A. this orientation took off in the 1960s and 1970s with changes in public interest, laws, and policy regarding the archaeological record (McGimsey 1972). During the last 20 years, engagement with local communities has been an increasingly important focus of public archaeology and archaeology in general, as witnessed by the emergence of topical journals (e.g., the *Journal of Community Archaeology* and *Heritage and Public Archaeology*) and a series of edited books, especially in the last few years (e.g., Gould 2019; Gürsu 2019; Merriman 2004).

This interest in and advocacy for community-engaged archaeology is global in nature (Jameson and Musteață 2019; Okamura and Matsuda 2012). It is also prominent in California, and the investigations of Kent Lightfoot and his colleagues (e.g., Lightfoot and Gonzalez 2018; Lightfoot et al. 2013) and of Tsim Schneider and Lee Panich (e.g., Schneider 2021; Schneider and Panich 2019) are notable examples of community-engaged archaeology, focusing on collaborative research on topics of interest to Native California descendant communities. Indeed, such projects across North America have been wonderfully successful, asking questions descendant communities are interested in, training Native American community members, and helping indigenous scholars to become professional archaeologists (Cowie et al. 2019; Silliman 2008).

Overall, these global archaeological developments have provided much insight into how to design and carry out community-engaged research projects, highlighting how individual projects will vary greatly based upon the descendant community involved (Gürsu 2019; Jameson and Musteață 2019). It has also been noted that in indigenous settings, an important first step is invariably for participants to acknowledge that archaeology has an early historical legacy founded in racism and questionable ethics, and that there is a need to actively work to decolonize its modern practices (Church 2020; Colwell 2016; Murray 2011). It is also important to recognize that most of these praiseworthy community-engaged projects have been done outside of CRM, and very rarely in challenging archaeological situations where modern development cannot or will not avoid impacting archaeological sites (Church 2020). In such contexts, moving from descendant community consultation to

meaningful collaboration is much more challenging, due to time constraints, costs, and reliance on normative CRM protocols. These trends and recent developments were very much on our minds when we embarked on this study, and as outlined here, we hope our experiences contribute meaningfully to the topic.

Similar trends toward community-engaged research are also taking place in related fields, notably in history and biological anthropology (Meloche et al. 2021; Smith 1988; Warren 2017). In biological anthropology, for example, there is now widespread and growing recognition that the ethical study of ancestors must be done with the consent and oversight of the descendent community (Bader and Malhi 2019). It is also important to stress that the perspective of indigenous communities regarding such investigations will vary greatly. Many will not want any study of their ancestors. Other tribes will have considerable interest in reconstructing who their ancestors were in life and will want to ask specific questions that have relevance to their community.

The edited volume *Working With and For the Ancestors* (Meloche et al. 2021) presents a series of collaborative studies where research on ancestors was first approved by the indigenous descendant community and then carried out in a collaborative, sensitive, and appropriate manner (e.g., Bader et al. 2021). The work at *Sii Túupentak*, presented here, is in this vein of collaborative research with the active participation of the descendant community.

SÍI TÚUPENTAK COLLABORATIVE STUDY

The *Sii Túupentak* collaborative project started well before the current social movement supporting racial justice for underprivileged and minority communities in the U.S., and evolved over more than half a decade. The collaboration involved the SFPUC (the development project proponent), the Muwekma Ohlone Tribe of the San Francisco Bay Area (the descendant community), joined by San Jose State University anthropology students, an archaeological research team led by Far Western and academic scholars from several universities, and the San Francisco Planning Department (the regulatory agency ensuring compliance with city protocols regarding state of California environmental laws and regulations, notably the California Environmental Quality Act).

Former Chairwoman and state-assigned Most Likely Descendent (M.L.D.) representative Rosemary Cambra, current Chairwoman Charlene Nijmeh, Vice Chair and current M.L.D. Monica V. Arellano (who also led the Muwekma's field team and served as primary monitor), and Tribal Archaeologist Alan Leventhal all played key roles in the project. The project also benefited from the experience gained by the Muwekma Ohlone's long-term program of historical and archaeological research that has included running their own CRM archaeological projects (e.g., Cambra et al. 1996; Field et al. 1992; Leventhal et al. 1987, 2015) and developing collegial relationships between members of the archaeological community and the Tribe. Many of those initial collaborative projects prominently involved Mark Hylkema while he worked for Caltrans. They included the Tamien Station project (CA-SCL-690), during which Muwekma Tribal members monitored, excavated, and were technicians in training at the Osteology Lab at SJSU, and also wrote their own ethnographic overview chapter (Hylkema 1994, 2007); and 1992 investigations at "Kaphan UmuX: The Three Wolves site," CA-SCL-732, a large, ancestral Native American cemetery site discovered in a San Jose interchange (Cambra et al. 1996), during which Hylkema assisted in certifying the Muwekma Ohlone Tribe and their archaeological firm, *Ohlone Families Consulting Services*, to direct the field work and write the report, despite opposition from the archaeological community.

One of the principal goals of this and prior Muwekma archaeological and historical investigations and collaborations with various scholars has been to shatter the widespread myth that the Muwekma Ohlone people are extinct and/or have no historic or biological claims to their ancestral heritage cemeteries and village sites.

In April 2014, Muwekma Ohlone Tribal leadership was approached by the SFPUC to discuss plans to construct an educational facility—the Alameda Creek Watershed Center—adjacent to the Sunol Water Temple, with a focus on the natural history of the Alameda Creek watershed. The agency intended to include space in the center for the indigenous inhabitants of the region to tell their story. Thus, the Muwekma Ohlone had the rare opportunity to present information to the SFPUC on their tribe's history and heritage and their relationship to the greater Sunol/Pleasanton/Niles/Livermore region from Spanish contact, through the twentieth century, and into

the present. The Alameda Creek Watershed Center is scheduled to open in 2023.

During these discussions, the Muwekma Ohlone Tribal leadership demonstrated to SFPUC officials (who funded the project) that by employing various records including Spanish Mission marriage, baptismal, and death records:

- their enrolled lineages descend from the California tribes of the greater East and South Bay region and could trace their ancestry back to their aboriginal villages;
- that their direct biological ancestors were missionized into the three Bay Area Spanish missions—San Jose, Santa Clara, and San Francisco;
- their families comprised the historic (after 1906) and previously federally-recognized Verona Band of Alameda County that resided in the Pleasanton (Alisal), Sunol, Livermore (Del Mocho), and Niles (El Molino) rancherias from post-mission secularization to the early twentieth century;
- they served as linguistic and cultural consultants to such notable anthropologists as J. P. Harrington and A. L. Kroeber between 1879 and 1934, when their last fluent speakers passed away;
- they had family members buried at the Ohlone Indian Cemetery in the city of Fremont during the nineteenth and early to mid-twentieth centuries;
- they enrolled with the Bureau of Indian Affairs between 1928 and 1971;
- they went to Indian boarding schools in the 1930s and 1940s; and
- they belonged to the Bay Area California Indian Council in the mid-1940s to 1950s.

All of these details were also published in the project's ethnohistory chapter, which was written by the tribal leadership and the Language Committee (Arellano et al. 2020).

Muwekma Ohlone families clearly lived for centuries within the greater Sunol region, and parents and grandparents were baptized at Mission San Jose as Indians. For example, co-author Monica V. Arellano's paternal grandfather Albert Arellano and his mother (her great

grandmother) Mercedes Marine were born on the Alisal Rancheria (1910 Federal Indian Census, “Indian Town” Pleasanton Township). Her father Joel C. Arellano, Sr. and his siblings regularly met and played on the rocks in Niles Canyon as children while visiting other Muwekma Indians living in Niles. Although left as a landless tribe, the Muwekma Ohlone never abandoned their tribal relations or left their aboriginal lands, and Muwekma families have maintained close ties and relationships to Sunol and surrounding areas during the twentieth century (i.e., born on the Sunol Rancheria, baptized, sent to the orphanage, and having funeral services at Mission San Jose) within the San Francisco Bay Area.

A Memorandum of Understanding was then developed so the Muwekma Ohlone could consult on the Watershed Center’s indoor and outdoor Native American cultural exhibits and serve as monitors on the archaeological work for the project. Tribal leadership made recommendations relative to the treatment of the archaeological site (*Sîi Túupentak*) that lay within the footprint of the proposed Watershed Center. Furthermore, SFPUC allowed the Tribe to recommend a Cultural Resources Management firm that they felt would be respectful of their input and leadership, and thus one they could trust. Far Western was recommended and accepted, and joined the project in June 2015; subsequently, the team—including the staff of the SFPUC—has collaborated in meaningful ways on this project.

The Muwekma Ohlone involvement in the community-based cultural resources work for the project has included the following:

- naming the archaeological site *Sîi Túupentak*, meaning “Place of the Water Roundhouse Site” in their native Chochenyo Ohlone language;
- recommending and approving all archaeological field and lab methods;
- reviewing, providing comments, and approving all of the technical reports (including: Research Design for Archaeological Testing, Archaeological Testing Report, Research Design for Archaeological Data Recovery, and Archaeological Mitigation Report);
- monitoring all fieldwork;
- excavating all ancestral burials;
- writing the ethnohistory chapter in the final reports;

- contributing to manuscripts and news stories published or disseminated about the project, including a peer-reviewed archaeological monograph on the investigations, several articles in professional journals, and articles in newspapers, including the *New York Times*;
- approving the curation plan (non-mortuary items were curated at Sonoma State University’s curation facility) and reburial of ancestors and sacred objects nearby and taking the lead on the reburial process;
- providing substantive input on the Watershed Center’s educational displays and programs that will prominently feature the Tribe’s history and highlight their ancestral heritage site;
- supporting and being active participants in all phases of the archaeological mitigation project documented in the PBS educational film *Time Has Many Voices* aimed at the broader Bay Area community.

The main archaeology field investigations carried out by Far Western and the Muwekma Ohlone involved a multi-stage field effort between 2016-2017 that included test excavations, data recovery investigations, remote sensing (Engbring et al. 2019; Grebenkemper et al. 2021), mechanical and manual archaeological stripping, and the excavation of all features and burials identified. Fieldwork entailed the excavation of 48 units, 10 trenches, and 1,130 liters of sediment floated and fine-mesh wet screened. It also ultimately entailed the stripping (including a substantive portion done manually) of 1,700 cubic meters of sediment covering the full building footprint to ensure that all burials and features were carefully identified and recovered prior to construction. Whenever conflicts or concerns occurred during more than a year of working side by side, the group (including SFPUC officials) sat in a circle under a tree at the site and had meetings. During these, the team talked through the process to ensure everyone was heard, and everyone listened to each other with respect and looked for common ground in what at times was a challenging endeavor, especially when numerous burials were encountered.

Collectively, Muwekma Ohlone tribal members and representatives of the scientific community are looking into the lives and deaths of ancestral people from the past. For the Tribe, this includes a variety of studies (notably

including accurate sex determination) conducted to provide enhanced perspective on the persona of each individual, to gain insight into them as the unique people that they were. Muwekma Ohlone would not survive to this day if it were not for the sacrifice, struggles, and commitment of their families. By retelling some of their history and stories through archaeology, the Tribe members celebrate the lives of their ancestors, and ultimately honor them when they are returned to the *warep* (translated as “the earth” in Chochenyo), where their loved ones originally placed them with affection and respect.

With regard to the study of their ancestors that might be encountered during fieldwork, rigorous state of the art archaeometric studies were requested by the Muwekma Ohlone at the very first archaeological meeting for the project in 2014. At the request of tribal leadership, a presentation to the Tribal Council on proposed methods and research specialties was conducted by Far Western. Approved analyses (using microsamples) for ancestral remains included radiocarbon dating; stable isotopes (carbon, nitrogen, strontium, sulfur) to examine diet, age at weaning, and changes in residence; study of teeth proteins to identify sex, especially of young individuals; paleogenomic DNA analysis to determine sex and ancestry/relatedness; ancient DNA (aDNA) analysis to confirm osteological indications of tuberculosis; dental calculus analysis to identify inhalant compounds, notably tobacco; and a pilot study of dental calculus to explore the oral microbiome aDNA with respect to diet and disease. Several presentations were made to the Tribal Council on emerging results during the project, and a talk on the project was presented at a tribal-wide meeting upon completion of the study. All of these studies were completed and published collectively as part of the overall study of *Sii Túupentak* as a UC Davis CARD monograph (Byrd et al. 2020a). A series of articles on various aspects of the results has also been published (Buonasera et al. 2020, In press; Engbring et al. 2019; Grebenkemper et al. 2021; Scheib et al. 2018; Severson et al. 2002).

HIGHLIGHTING *SII TÚUPENTAK* RESULTS

Setting, Age, and Site Structure

Sii Túupentak is located on an alluvial floodplain near the confluence of Alameda Creek and Arroyo de la Laguna within the Alameda Creek watershed, the largest in the

southern San Francisco Bay Area. Situated adjacent to a rich riparian setting, the extensive Sunol Valley was an oak savanna with adjacent grasslands, and the nearby hills contained a mixed hardwood forest (Stanford et al. 2013). The site is a large (6.9 acres) sedentary village site consisting of a thick deposit of cultural material along with an associated cemetery (Byrd et al. 2020a). In the middle of the site there is a low (30 cm.) anthropogenic mound (approximately 30 meters in diameter) formed by intensive occupation activity. Archaeological investigation of 6.2% of the site recovered a wide range of cultural remains, including more than 13,000 artifacts, numerous food remains, 36 features, and 66 burials comprising 76 individuals.

Sii Túupentak dates from 605–111 cal B.P. (1345–1839 C.E.), based on 129 radiocarbon median intercept results from 96 burials and features (Byrd et al. 2020a:83–86). More than 95 percent of the features and burials are concentrated in a narrower time span from 539–145 cal B.P. (1411–1805 C.E.), indicating that *Sii Túupentak* was primarily occupied for around 400 years. This occupation encompassed the last 100 years of the central California Late 1 Period (full extent of period 685–440 cal B.P.), all of the Late 2 Period (440–180 cal B.P.), and almost 30 years of ‘historical era’ occupation after the arrival of the Spanish (Groza et al. 2011). Thus, the site was founded prior to European contact and continued to be inhabited during early European coastal exploration. This colonial exploration started 408 cal B.P./1542 C.E. and continued through the region’s Spanish colonization, which began locally 173 cal B.P./1777 C.E. with the founding of missions San Francisco Asis (Dolores) and Santa Clara, until most of the inhabitants were forced into the Spanish mission compounds (145 cal B.P./1805 C.E.). The site was also reoccupied in the 1830s C.E. after the Spanish empire lost control of Alta California.

Five site components (Late 1, Late 2a, Late 2b, Late 2c, and Historic) were defined for intra-site analysis, based on the temporal distribution of dated features and burials (Table 1). Notably, the Late 2c component continued until 145 cal B.P. (1805 C.E.) in the “Historic/Mission” period, based on radiocarbon dating evidence of occupation continuity. This is consistent with Spanish mission records that demonstrate that 98 percent of the Ohlone of the Sunol area (the *Causen* tribal community) listed in the Spanish mission registries did not relocate

Table 1

SÍI TÚUPENTAK TEMPORAL COMPONENTS-BASED RADIOCARBON MEDIAN INTERCEPTS OF FEATURES AND BURIALS

Period (Groza et al. 2011)	Site Component	Total Span (cal B.P.)	Total Span (C.E.)	Burial % (n = 70)	Feature % (n = 26)
Historic: 145–50 cal B.P. (1805–1900 C.E.)	Historic	119–112 (9 years)	1831–1838	1%	4%
Late 2: 440–145 cal B.P. (1520–1805 C.E.)	Late 2c	199–145 (54 years)	1744–1805	11%	17%
	Late 2b	312–273 (39 years)	1638–1677	37%	6%
	Late 2a	395–362 (33 years)	1512–1588	23%	26%
Late 1: 685–440 cal B.P. (1265–1520 C.E.)	Late 1	539–441 (98 years)	1411–1509	26%	44%
		605–601 (4 years)	1345–1349	1%	2%

to the missions until 153–146 cal B.P. (1797–1804 C.E.), when nearby Mission San Jose was founded (Milliken 2010). Finally, the historical-era component dates from 119 to 112 cal B.P. (1831 to 1838 C.E.), documenting post-mission use of the site by Native people during the Mexican period presumably associated with the adjacent Suñol ranch complex.

Intra-site analysis revealed strong, temporally-driven spatial patterning during settlement occupation. Features and burials were concentrated in a 65-by-20-meter area, with most from the Late 1 Period in the northwest portion of this concentration, and the vast majority of Late 2 burials and features (and 60% of all burials) within and immediately to the southeast of the low mound (Fig. 2). In contrast, the historic Mexican Period Native American feature and burial were situated much farther to the southeast of this concentration. Generalized site midden deposits were also patterned along this northwest-southeast site axis (from Late 1 to Historic Period in age). Notably, over time, based on generalized site deposit constituents that were spatially associated with the remains from each period, there was increased reliance on imported Napa obsidian for flaked stone tool use, shifting from moderate (45%) in the Late 1 Period to overwhelmingly dominant near the end of the Late 2 Period (up to 83%).

Subsistence Economy

Features were dominated by residential-related fire-affected rock concentrations, ash lenses, and large roasting pits (Fig. 3). In addition to these domestic features, a large formal hearth and a pit feature may have been used in ceremonial activities. Subsistence analysis reveals the inhabitants actively managed the local landscape, and that prescribed burns were undoubtedly undertaken to enhance grasslands

and small-seeded plants (Wohlgemuth 2020; see also Lightfoot and Lopez 2013). Wohlgemuth's (2020) study demonstrates that plant resource processing was strongly associated with domestic features, sometimes represented by plants collected during a single season and sometimes by plants collected during more than one season. In these contexts, small-seed processing (notably farewell to spring, fescue, and hairgrass) was more important than that of nuts. Overall, the site's rich archaeobotanical assemblage included 50 plant genera dominated by small seeds and nuts (primarily acorn and then bay nut). Most are spring-ripening small-seed taxa (46%) and summer small-seed and berry taxa (42%), with fewer fall-ripening nut taxa (12%)—a seasonality distribution consistent with a sedentary village community, given that all key seasons of plant availability are represented. Eurasian cultigens (wheat, barley, and watermelon) and weeds (such as filaree and cheeseweed) and New World domesticated corn are present and were primarily recovered from two Late 2c features and the historical-era Native American feature.

Analysis by Whitaker (2020) reveals that vertebrate faunal remains from features and elsewhere include both large and small mammalian fauna (notably deer, rabbits, hares, various carnivores, and rodents), with many fewer birds and other remains. Domestic dog is also present, based on aDNA results by Brian Kemp (Whitaker 2020:251). Fish were also important, mainly represented by freshwater fishes (especially Sacramento sucker), along with a moderate quantity of salmonids, pike minnow, and surfperch (Gobalet 2020). Estuarine fish and shellfish taxa were uncommon, and the former declined over time. The results reveal a consistent and sustained pattern of procurement throughout the sequence with an absence of large mammal resource depression.

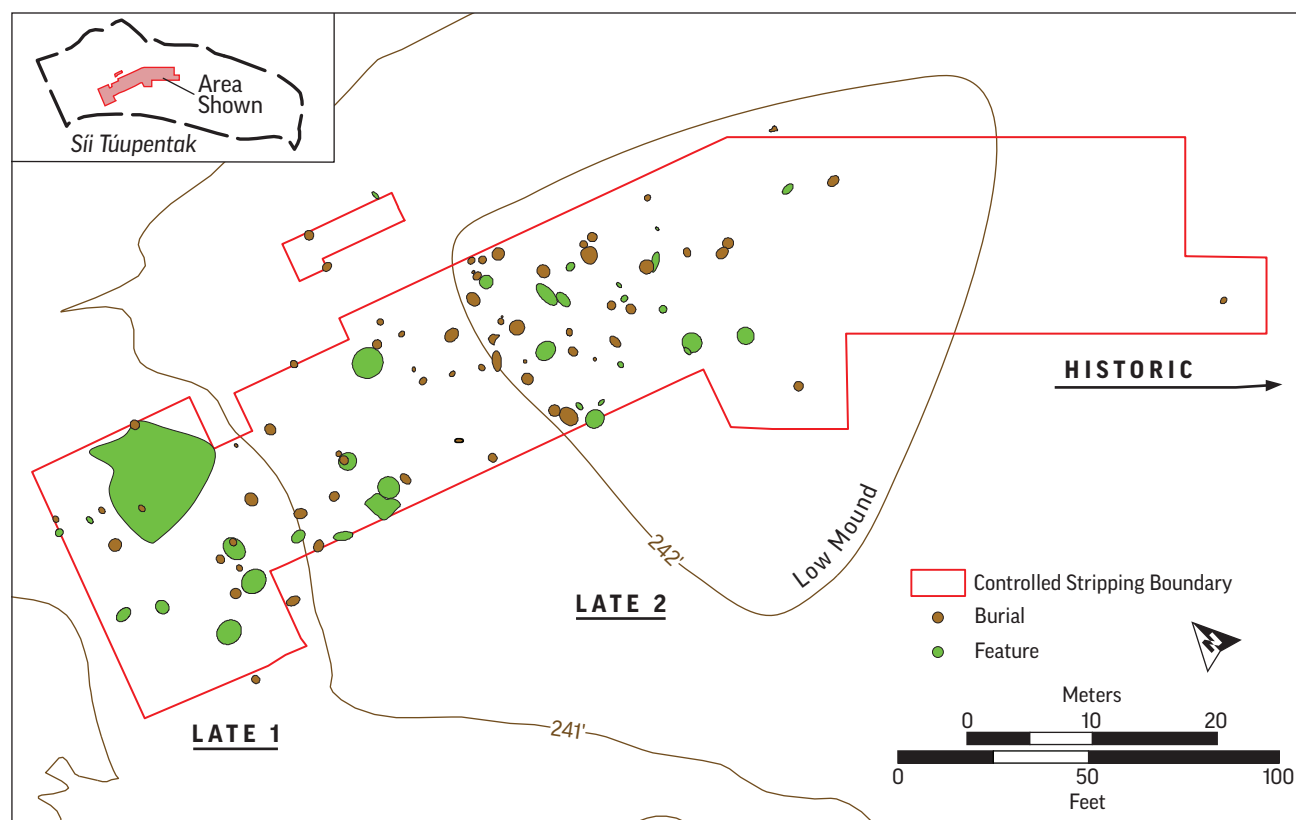


Figure 2. Map showing distribution of burials and features by period, and location of low anthropogenic mound.



Figure 3. Roasting pit Feature 10.

Instead, a healthy U-shaped artiodactyl population (with younger and older adults dominating the assemblage) persisted despite hunting throughout the year, particularly in the fall and winter, based upon a dental increment seasonality analysis by Jaffke and Peabody (Whitaker 2020:229–230). Eurasian domesticates are not present in protohistoric features, a trend consistent with prior investigations of sites of this age in the Bay Area (Byrd et al. 2018). The lone 1830s historical-era feature includes cattle, goat, and domestic cat, a shift consistent with Native American's access to domesticated resources while working on the adjacent Suñol Rancho.

LIVED LIVES

As requested by the Muwekma Ohlone, detailed archaeometric analyses of the 76 individuals recovered from burial excavations yielded new insights into the lives of these unique individuals, as well as community trends and insights into social and ideological complexity. Multi-factor sexing of adults and younger individuals—combining the results of osteological, ancient DNA (aDNA), and amelogenin protein from teeth—allowed for comprehensive sexing of a burial population for the first time in indigenous California, and the ability to differentiate between health, diet, and mortuary trends in females and males of all ages (Buonasera et al. 2020; DiGiuseppe and Grant 2020; Malhi et al. 2020; Parker et al. 2020). Based on the analyses, the biological sex of the indigenous ancestors included 32 females, 34 males, and 10 of indeterminate sex.

Nuclear genome aDNA analysis by Malhi and colleagues provided new insights into broader Native American lineages and early migration patterns in the peopling of the New World (Malhi et al. 2020; Scheib et al. 2018). Notably, Severson et al. (2022), in a study of 12 ancestors from *Sîi Túupentak* and nearby *Rummeý Ta Kučučwiš Tiprectak* and eight present-day members of the Muwekma Ohlone, demonstrated that these pre-contact individuals shared a distinct ancestry from other groups, as well as an element of continuity over time with living Muwekma Ohlone tribal members. As Severson et al. (2022:7) noted, “the shared ancestry components provide support for genetic continuity between the individuals from the *Rummeý Ta Kučučwiš Tiprectak* and *Sîi Túupentak* archaeological sites and between the two sites

and the present-day Muwekma Ohlone.” The results indicate that the Ohlone arrived in the Bay Area at least 500–1,000 years earlier than the 1,500–1,000 cal B.P. time frame typically suggested (Fagan 2004; Golla 2011; Levy 1978a). Mitochondrial genomic aDNA analysis revealed that the population of *Sîi Túupentak* was primarily composed of individuals from haplogroup D, with lesser representation by haplogroups C and B. This differs markedly from the results from most other nearby sites (Byrd et al. 2020a:Fig. 201; Monroe 2014, 2019), probably due to long-term differences in mating interactions between territorial communities.

A notable osteological observation on health and disease was also confirmed by an aDNA analysis conducted by Anne Stone, who demonstrated that at least four individuals from *Sîi Túupentak* were suffering from tuberculosis, generally considered to be a disease introduced to North America by Europeans (DiGiuseppe and Grant 2020:276). All were males, including three juveniles and one infant, with median age intercepts from 478–312 cal B.P. (1472–1638 C.E.) and all but one dating to 382–290 cal B.P. (1568–1638 C.E.). These results indicate that early European explorers (who landed at nearby Monterey or along the Mendocino/Marin coasts following established trade networks) may have first introduced the disease to the region, rather than its original introduction coinciding with Spanish colonization in the late 1700s.

Variations in diet and survivorship were observed both between males and females, and between adults and younger individuals. In terms of dietary patterns, a stable carbon, nitrogen, and sulfur isotope analysis by Eerkens et al. (2020a) revealed that males consistently consumed higher trophic-level foods than females (both among adults and children), and that there was an overall steady temporal trend towards a reduction in diet breadth and an intensification in the use of regional resources. In terms of childhood diet, Eerkens et al.'s (2020b) study (based on serial nitrogen and carbon isotope samples from teeth) revealed that males were weaned on average almost a year earlier than females (2.3 versus 3.2 years). As detailed by Buonasera et al. (In press), male infants (five years or younger) were also less likely to live to adulthood, dying almost twice as often as female infants, and there appears to be a positive correlation between isotopic dietary signals and an individual's survivorship

into adulthood. This is likely the result of a biological survival advantage in female infants (e.g., Zarulli et al. 2018), combined with such extrinsic factors as disease, nutrition, and engendered enculturation.

Other differences between male and female adults were also discerned. Strontium isotope analysis of molars and bone by Harold (2020) revealed trends in residential marriage patterns, with more females than males immigrating around the age of puberty, indicating a preference for patrilocal. General migration frequency also decreased over time, indicating that fewer people immigrated from farther afield. This may suggest a reduction in the need for exogamy over time, likely due to a growing local population with more potential marriage partners.

A liquid chromatography-mass spectrometry analysis of dental calculus by Tushingham et al. (2020) showed that there were also differences between males and females in the use of psychoactive plant inhalants. Compared to males, a higher proportion of women of varied ages tested positive for nicotine use. Moreover, there are patterned differences in the location of nicotine on teeth—among men, it is found primarily on the front teeth, which is indicative of smoking, while among women it is located primary on the back teeth, which is indicative of tobacco chewing. These results contradict ethnographic reports that mention only tobacco smoking, and state that males of all ages were the predominate users, with only occasional older women and female shamans smoking tobacco (Harrington 1932; Tushingham et al. 2020:357; Winter 2000a).

MORTUARY PRACTICES

Investigations of mortuary practices revealed a series of patterns, the most notable of which are highlighted here (Byrd and Engbring 2020). Some 79% of the 76 ancestors documented were present as inhumations and 21% were cremations. There was a shift from uniform mortuary treatment in the Late 1 Period (exclusively primary inhumations, typically loosely flexed on their back or right side) to highly varied and more complex interment practices in the Late 2 Period that included cremations (26%) and secondary inhumations (6%) for the first time. The earliest cremation is dated to 387 cal B.P. (1563 C.E.) during the Late 2a component, and relative cremation

frequencies rise in later components. Cremations mainly involve adults (94%; and 39% of all Late 2 adults), and cremated males (mainly young or middle-aged adults) are twice as common as females. All were secondary burials (i.e., were cremated elsewhere), and two-thirds were interred in two adjacent clusters of five individuals each, interred over a considerable period of time. One cluster was centered on a large formal hearth; the other cluster had stone cairns with mortars overlying each individual.

Another significant Late 2 mortuary development was the ritual use of red pigment on human bone and on select artifacts (lipped type E shell beads, bone whistles, and a mortar). Red pigment, dated to the Late 2b and 2c components (296–183 cal B.P./1654–1767 C.E.), occurs with 21% of the burials. Most is bright reddish-orange cinnabar (mercury sulfide) pigment, along with some hematite, distinguished by X-ray fluorescence (XRF) analysis (Martindale Johnson 2020a). Cinnabar pigment occurs with 30% of adults from these components—typically males (71%) and especially cremated individuals. In contrast, only a single younger individual has associated cinnabar pigment. Cinnabar was also used by the Ohlone in historical times as a paint for a variety of ceremonial and ritual purposes, including as body paint, for pictographs, and for wall painting at the Mission Santa Clara church (Coombs 1999; Hylkema 2010; Jones 2015).

With respect to mortuary items, a diverse range of offerings and combinations of non-perishable items were interred with burials, highlighting the uniqueness of individuals. *Olivella* shell beads dominated the list of mortuary items (Eubanks 2020; more than 90% of the almost 4,500 items recovered), along with a fair number of abalone shell ornaments, projectile points, mortars, pestles, and whistles, with lesser quantities of 20 other types of items, including smoking pipes (Figs. 4 and 5). Most individuals had mortuary offerings (83%), typically involving just a few items, but some had many items. Individuals with numerous mortuary offerings were from varied temporal components, locations in the site, and DNA-based matrilineages; they also included inhumations and cremations, men and women, and diverse ages (including a fetus).

Four ancestors are highlighted here with respect to mortuary offerings to illustrate variations in practice. Each lived a unique life, and they were mourned by



Figure 4. Select Sii Túupentak artifacts including thin rectangles (Class M) *Olivella* beads, banjo abalone pendants, projectile points, very large incised bird bone, bone whistles, and composite smoking pipe.



Figure 5. Select *Sii Túupentak* artifacts including two flower-pot/show mortars and a pestle.

family and friends after their passing, as evidenced by their careful and sometimes lavish interments. Late 1 Period Individual 66 was born around 1429 C.E. (521 cal B.P.) at a different settlement (i.e., outside of the *Sii Túupentak* strontium isotope range) and lived to the age of 35–40 years. She was buried with more funerary objects (n=1,154) than any other individual. Most (97%) were rectangular M-series *Olivella* sequin shell beads,

often overlapping (see Fig. 4), which were likely stitched onto a garment or blanket, along with 25 abalone shell ornaments, two bone whistles, a bone tool, one flower-pot/show mortar (see Fig. 5), four pestles, and another ground stone item. The whistles were placed on her neck and cheek, and the imported flower-pot/show mortar was ritually broken along its rim. Large, finely-made volcanic mortars from *Sii Túupentak* and elsewhere were

undoubtedly used in special ceremonies, such as feasting or food-related ritual events associated with the (re) distribution of food resources, and their deposition with selected individuals likely implies that these individuals occupied an elevated social rank within the local community (Bellifemine 1997; Buonasera 2013:205–206; Leventhal 1993:222–225, 261–263; Martindale Johnson and Byrd 2020:474–480).

Late 1 Individual 36 was born at *Sîi Túupentak* more than a half century later, around 1473 C.E. (477 cal B.P.) and died some 17 to 20 years later. Although the number of total associated mortuary items was relatively low and notably no shell beads were present, there was a high diversity of offerings. She was accompanied by five bone whistles, and she had a pestle on her outstretched right arm, two whistles behind her neck, and two bone tools elsewhere (see Fig. 4). She was also interred with the only two banjo abalone ornaments documented at *Sîi Túupentak* (both probably suspended as a necklace; see Fig. 4). They are notable, since they have been suggested as identifying Kuksú ceremonial system big head dancers and possibly indicating membership in the Kuksú religion (Hedges 2019; Hylkema 2002; Leventhal 1993; Milliken et al. 2007).

Individual 62 was a female *in utero* neonate aged 36–40 weeks in component Late 2b (1646 C.E./304 cal B.P.). She was interred with 239 *Olivella* shell beads (primarily spire-lopped Type A), two projectile points, and a very large, elaborately incised bird bone tube (see Fig. 4). This individual is noteworthy for several reasons: she was the only fetus with mortuary items not interred with an adult, she had more associated items than all but eight individuals in the mortuary population, and is the only individual buried with an incised bone tube.

Finally, Late 2b Burial 49 is a double interment of cremated adult males dated to 1662 C.E. (283 cal B.P.). One man was in his 20s, with more than 200 (mostly E-Series lipped) *Olivella* beads and two Stockton Serrated obsidian arrow points. The other individual lived to 35–40 years of age and was interred with 21 mostly obsidian projectile points of varied types (see Fig. 4, including three non-local point types; several of the points were embedded in his body), 21 mostly spire-lopped *Olivella* shell beads, a large pestle (see Fig. 5), two obsidian bifaces, and assorted obsidian flakes and a flake tool. A substantial overturned bowl mortar was situated next to both individuals.

Considerable attention has been placed on mortuary practices as a way of gaining insight into socio-political complexity and identifying elites in northern California and elsewhere (e.g., Atchley 1994; Bellifemine 1997; Byrd et al. 2017:12-1–12-4; Gamble 2008; King 1974; Leventhal 1993). There has also been greater recognition of the fact that there is not always a simple 1:1 relationship between mortuary offerings and status or wealth, since mortuary events are public occasions where shared social meanings and memories are constructed, social order is reinforced, group cohesion is promoted, and community-wide identities are crafted (e.g., Reddy 2015). This highlights the need to explore social identity, agency, and interaction with respect to a wider range of social categories (including age, sex, and group affiliation) when considering mortuary practices (Byrd and Rosenthal 2016; Gardner 2013; Leventhal 1993; Luby 2004).

Overall, several factors may have contributed to variations in mortuary offerings: achieved status, intra-community membership/lineage, and the loss felt by surviving family members. There is no unequivocal mortuary evidence of either hereditary elites (where, for example, families of individuals of both sexes and all ages have many more mortuary offerings, were buried in close proximity to each other, and/or were buried in a distinctive and elaborate manner) or an extremely poor segment of the community. Instead, in the Late 2 Period, there is an increasing divergence in mortuary offerings, with adult cremations having a mean and median 10 times greater than adult inhumations. Cremated adults also have greater shell bead ubiquity, many more non-shell bead items, and consumed more foods of a higher trophic level, an indication that their diets were richer in meat (Eerkens et al. 2020a). Interestingly, Late 2 Period adult inhumations also have 50 percent fewer mortuary items on average than Late 2 younger individuals, with older adults having the least associated items. These differences in mortuary behavior and offerings between Late 2 adult cremations and inhumations may signify more broad-scale, intra-community social differences in mortuary treatment. At the end of the sequence (Late 2c, post-199 cal B.P./1744 C.E.), there is an uptick in median mortuary items, the diversity of total items, the ubiquity of shell beads, and the quantities of non-shell bead items, despite the lowest mean in mortuary items. Both internal and possibly external factors (such as disruptions in

long-standing trade networks) may have influenced these Late 2c mortuary trends toward more varied and evenly distributed mortuary offerings within the population. These trends highlight changes in the complexity of mortuary practices, especially in the latter half of the occupation span.

SOCIOPOLITICAL IMPLICATIONS OF TRADE AND EXCHANGE

Fine craftsmanship is exhibited in the elaborately made and abundant non-perishable material goods of the *Sii Túupentak* community. Many items were made with locally available products—elaborate bone awls, whistles, and the incised tube, as well as ground stone pestles and bowl mortars made of local greywacke (Galindo Arias 2020; Martindale Johnson 2020b). A considerable number of items, including the three most common mortuary offerings, however, were non-local trade goods. Although trade details are unknown, acquisition of these items was most likely via trade and exchange (and typically as finished items), since direct source acquisition would have required traveling through the territories of three or more tribes, and at times having to cross into the territory of non-Ohlone-speaking Bay Area groups (Fig. 6).

Olivella shell beads and abalone pendants were imported primarily from along the central California coast, a distance of at least 50 km. A nearby prominent hematite source is 30 km. to the northwest, while the only source of cinnabar is the Pooyi/Almaden Mine area of Mount Umunhum 45 km. to the south, where the Ohlone had active mining tunnels in 150 cal B.P. (1800 C.E.) if not earlier (Coombs 1999; Heizer and Treganza 1972:302, 311–312). Flowerpot/show mortars (all four of which were recovered from mortuary contexts) were XRF sourced to a volcanic outcrop at Mount Diablo 35 km. to the north (Martindale Johnson 2020b: 141–146; see also Bennyhoff 1977). These very large (at least two times the largest bowl mortars), well-finished and unique mortars were likely acquired as finished products via trade with the Bay Miwok that resided near Mount Diablo. Obsidian (the dominant flaked-stone raw material for both debitage and tools, despite the presence of local cherts) was imported from the Napa and Annadel sources in Wappo territory, a distance of 110 km., with seven tribes, the Bay, and two language groups in between.

The widespread extent of this active system of trade and exchange involving these luxury goods testifies to the wealth of the community and the settlement's importance in central California. It also provides insight into the structure and organization of regional inter-territorial community interaction and alliance maintenance, reinforcing the importance of well-developed rules of political, social, and religious interaction mediated by community leaders (Bean and Lawton 1973; Gardner 2013; Leventhal 1993). The nature and extent of these interactions appear to have varied across this region, suggesting overlapping spheres of social interaction reinforced by trade and the exchange of finished goods, raw materials, mates, food resources, and other material attributes of these socio-political, economic, and symbolic interactions. Notably, widely traded emblematic objects reflect a community of practice that was contingent on shared beliefs and ideas grounded in ceremonial and socio-political interaction (Wenger 1998).

In the eastern Bay area, flower-pot/show mortars and banjo abalone ornaments are both present, with mortars more frequent in the north and the pendants much more ubiquitous in the south (Byrd et al. 2020a:469–486). Clam shell disk beads, on the other hand, are absent or very rare south of the Sacramento River, and only a single one was recovered from *Sii Túupentak* (Eubanks 2020; Rosenthal 2011). Finally, high-volume trade of Napa obsidian was concentrated in the inland east Bay Area valleys and extended only as far south as *Sii Túupentak*. Napa obsidian is present at Native American settlements within the tribal territories in the east Bay margins, northern Santa Clara Valley, and the San Francisco Peninsula, but it is not the dominant raw material used (Byrd et al. 2020a:472–473). These overlapping interaction spheres cross-cut linguistic and territorial community boundaries in much more varied and complex ways than has thus far been appreciated.

FORCED ABANDONMENT AND PERSEVERANCE

Spanish Mission Santa Clara and the San Jose Pueblo were founded in 1777 C.E. (173 cal B.P.) only 30 km. to the southwest (Milliken 1995). Despite being situated relatively close by, *Sii Túupentak* was somewhat buffered by the presence of other Ohlone territorial communities

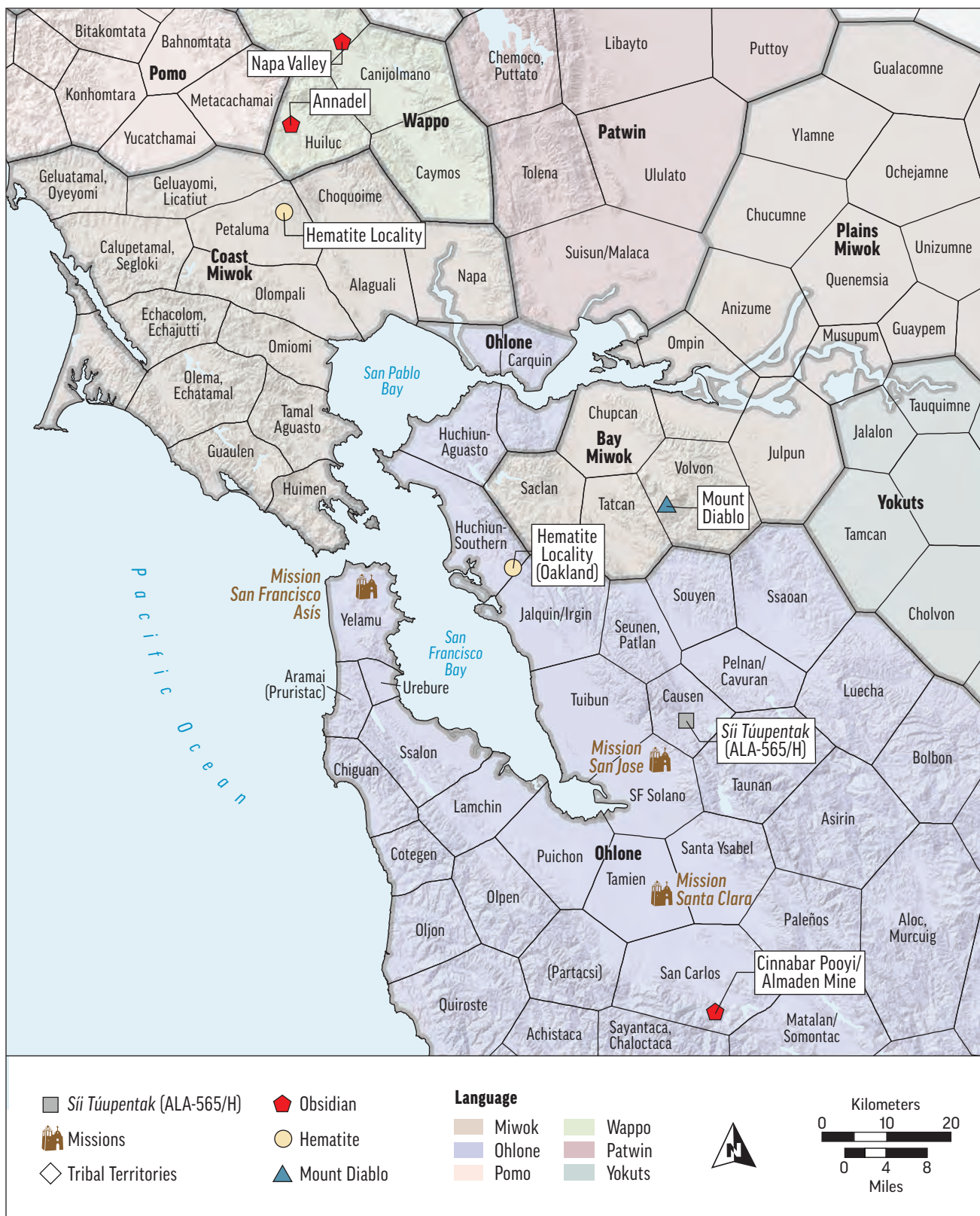


Figure 6. Prominent raw material source localities in relationship to *Sii Túupentak* and tribal community territories.

(Tamien, Santa Ysabel, and SF Solono) between them and the newly arrived colonizers at Mission Santa Clara and Pueblo de San Jose (see Fig. 6). During the several decades of regional co-existence, there is limited material evidence of interaction with the Spanish—a few glass trade beads, and two features with introduced domestic food remains, including watermelon, grain (probably wheat or barley), and corn as well as filaree, a non-local weed. This is consistent with the low-level integration of colonial items at indigenous settlements in the Bay Area during the Spanish colonial period (Byrd et al. 2018), and the conservative incorporation of newly introduced foods into the indigenous diet noted elsewhere in California (Reddy 2015).

Historical records reveal that external events that took place less than a decade before *Síi Túupentak* was abandoned circa 1804 had a profound impact. Mission San Jose was founded on June 11, 1797 C.E. (153 cal B.P.), just 6.5 km. to the southwest of the Ohlone settlement (Milliken 1995, 2008). This was immediately followed by a violent summer of concerted efforts by Spanish soldiers to exert their control over the lands near their new mission, to capture Ohlone and Bay Miwok runaways from missions San Francisco and Santa Clara, and to punish the Native Americans still living in independent villages in the southeast Bay region that had given them refuge (Milliken 1995, 2008). Was *Síi Túupentak* visited during these military raids? That is unknown, but it is likely, since this was the closest substantial indigenous settlement to the new Spanish outpost. Certainly, the inhabitants knew their options had just become more limited, and their lives were about to change significantly.

On September 7, 1797, a few days after the first baptism at the mission, the first Ohlone from the *Síi Túupentak* area came to Mission San Jose and were baptized—five children aged 2–8 were brought by an elderly native man (Milliken 2010). By the end of the year, two-thirds of the newly baptized people at the mission were from the *Síi Túupentak* area. The archaeological dating evidence from *Síi Túupentak* is consistent with the mission baptismal records, which confirm that during the next eight years, until 1804 C.E. (146 cal B.P.), 209 Ohlone from the *Síi Túupentak* area relocated to the mission (and only one did so afterwards, in 1807). They helped build its now famous church, worked the mission agricultural lands where Ohlone College stands today, and

undoubtedly planted and tended the mission's orchards and fields, as well as the incipient herds of cattle. This was, however, a harsh and foreign setting for them, and life expectancy at this colonial outpost was on average only eight years, based upon an analysis of the digital mission records (Milliken et al. 2006). As a result, only four people from the *Síi Túupentak* area survived until the Spanish colonial effort collapsed in 1833 C.E. (117 cal BP). One of those survivors was Moychol (MSJ-B 6) from “de la Lameda” (Alameda Creek), a two-year-old boy who was part of the first group from *Síi Túupentak* to be baptized at the new mission.

The Ohlone narrative did not end there—*Síi Túupentak* also has a modest 1830s Mexican period component, complete with a feature and burial, revealing post-Spanish-era use of the site by Ohlone that returned to this persistent place (Byrd et al. 2020a; Luby 1995). Some were undoubtedly among the Native American laborers documented as having worked at the Mexican period *Rancho El Valle de San José*, which was centered on the Sunol area, and the 1845 Suñol Adobe (situated within the pre-contact Ohlone settlement of *Rummey Ta Kuččuwiš Tiprectak*) was located 400 meters away (Arellano et al. 2020; Byrd et al. 2020b; Ross et al. 2020). The subsequent American period presented new challenges for the survivors of missions San Jose, Santa Clara, and San Francisco, but their descendants persisted nearby, living in Niles Canyon to the west, and near Verona station at the Alisal Rancheria to the northeast (Arellano et al. 2020). They continued to work in the local area, and the descendants from the historic, federally recognized Verona Band of Alameda County are thriving today as the Muwekma Ohlone Tribe of the San Francisco Bay Area, who collaborated on and actively participated in the design, implementation, and fieldwork at *Síi Túupentak*. They are also active stewards of their ancestral sites and a vital part of the Bay Area community.

CONCLUSIONS

This study has provided fresh insights into indigenous lifeways during a 400-year period, from just prior to early European exploration, through Spanish colonization and the forced relocation of many Native Californians into the missions in central California—a period of significant change in the lives of native people. Overall, the evidence

demonstrates that *Sîi Túupentak* was a substantial, sedentary village, undoubtedly the most important village within the Causen Ohlone territory. This community was also an important node in central California inter-regional social interactions, interactions that were deeply meaningful and demonstrative of a set of shared beliefs and ideas. These complex inter- and intra-community dynamics entailed diverse elements, some of which were expressed in the form and patterning of material culture, while others were expressed in the life histories of the individuals that comprised these communities. These patterns were nuanced and filtered by social conventions tied to local community size, families, and lineages, and the social agency of the individuals within them. These ritualized practices helped to bond these distinctive territorial communities together into a rich tapestry of shared beliefs, practices, and obligations that reinforced social order and promoted regional cohesion within this densely populated area of central California.

This was also a substantial collaborative, community-engaged research project, with agency representatives, tribal members, and archaeologists working together during more than a year of fieldwork and research, resulting in a tremendous co-generation of knowledge of benefit to the descendent community. This paper has attempted to share our experience doing collaborative archaeology in a CRM mitigation context, as well as demonstrate that archaeological investigations centered on the co-production of information are both necessary and possible. It is also important to emphasize that the Muwekma Ohlone “Indianized” the collaborative process, which included reciprocity, mutual benefits between the scientific community, SFPUC, and the tribe, and mutual respect, acknowledging the tribe’s history, heritage, and intellectual property.

Despite the challenges of a large, fast-paced excavation and the breadth of the discoveries, it was a collectively enriching and rewarding experience. Given that archaeological findings can be unpredictable, collaborative endeavors also require periodic recalibration to ensure goals and methods are in sync for everyone, and if needed, new approaches and solutions can be implemented. Our experiences underscore the importance of research and methodological flexibility even while fieldwork is ongoing, which can be difficult due to a number of factors, including financial considerations.

One of the most important lessons learned was that a community-based project like this can only succeed with the effective and willing involvement and in partnership with the project proponent and the regulatory agency. These keystones of the CRM process are generally underappreciated (especially in CEQA-only projects), and much more support and recognition of outstanding regulatory practitioners is crucial, as is a willingness to call out those that are failing in their regulatory responsibilities. More graduate training is also needed to prepare students to succeed in such roles. In the case of this project we wholeheartedly acknowledge the efforts and support of our key partners on the staff of the SFPUC and the San Francisco Planning Department.

Of course, in hindsight there are aspects of the project that could have been done better or differently. More involvement of Muwekma Ohlone excavating units and features (and not just burials) would have been beneficial to all parties. Similarly, a better integration of the descendant community into the laboratory phase would have increased inclusivity at every stage of knowledge production and provided long-lasting dividends for everyone.

Working so closely together during this project resulted in the creation of strong relationships of mutual respect within this “new ecology of learning” (Warren 2017). It also facilitated several key goals, including empowering Muwekma tribal participants, refining cross-disciplinary approaches that enabled archaeologists to relate ethically and effectively with the descendant community, and the repatriation of knowledge to aid in the rediscovery of historical details and the creation of new narratives (e.g., Barnes 2017; Warren 2017). An important Muwekma Ohlone objective was to move away from the abstract and impersonal ways that academics have described their ancestors. Instead, they wanted to honor and celebrate the perseverance and tenacity of their ancestors as individuals, by respectfully telling the story of their lived lives. We believe this study successfully accomplished this and several other key objectives.

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IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS

Sacramento Area Office
2800 Cottage Way
Sacramento, California 95825



Ms. Dena Magdaleno
Post Office Box 56
Burnt Ranch, CA 95527

JAN 23 1998

Dear Ms. Magdaleno:

This is to acknowledge receipt of your letter dated December 16, 1997 and received in this office on December 22, 1997. Please accept our apologies for the delay in responding.

At your request, I am writing a letter of support for the Tsnungwe Council and the Muwekma Ohlone Tribe in their bid for Federal recognition. First let me state that the Bureau of Indian Affairs, Sacramento Area Office, is painfully conscious of the fact that California Indian tribes and their individual members have suffered numerous atrocities and inequities from the dominant culture through the hands of the United States Government and the State of California. To this day, those tribes who are fortunate to have Federal recognition status continue to suffer inequities in their share of Federal funds compared to funds received by similar tribes in other states. To that end, this office fully supports efforts by Indian groups such as the Tsnungwe Council and the Muwekma Ohlone Tribe in their bids for Federal recognition status.

Along with your request regarding the Tsnungwe Council, you provided a letter signed by the Acting Director, Office of Tribal Services, which acknowledged that you had established evidence that your ancestors were considered as parties to the 1864 Treaty. We concur with the Central Office of this finding and will support your bid for Federal recognition. I believe the Assistant Secretary - Indian Affairs has the administrative authority to reaffirm Federal status to your tribe.

Although the Central Office has noted that the 1851 Treaty did not provide conclusive evidence that the treaty did not establish clear evidence of Federal recognition of your ancestors, I am fully supportive of your efforts to establish "unambiguous" Federal recognition of your ancestral group as a tribal entity.

The Bureau of Indian Affairs, Sacramento Area Office, is ready to assist the Tsnungwe Council and the Muwekma Ohlone Tribe in seeking administrative Federal recognition on the basis your tribes were never terminated.

Sincerely,


Acting Area Director

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

MUWEKMA TRIBE,

Plaintiff,

v.

BRUCE BABBITT,,
Secretary of the United States Department
of the Interior, and

KEVIN GOVER,
Assistant Secretary for Indian Affairs,
United States Department of the Interior,

Defendants.

Civil Action No.: 99-3261 (RMU)

Document Nos.: 27, 28

MEMORANDUM OPINION

Granting the Plaintiff's Motion to Amend the Court's Order

I. INTRODUCTION

The Muwekma Tribe is a tribe of Ohlone Indians indigenous to the present-day San Francisco Bay area. In the early part of the Twentieth Century, the Department of the Interior ("DOI") recognized the Muwekma Tribe as an Indian tribe under the jurisdiction of the United States. In more recent times, however, and despite its steadfast efforts, the Muwekma Tribe has been unable to obtain federal recognition, a status vital for the Tribe and its members. Without federal recognition, the Tribe cannot receive the benefits of health care, housing, economic development, and self-governance that the United States provides to federally recognized tribes. *See* Pl.'s Mot. for Summ. J. at 2; 25 C.F.R. § 83.2.

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

MUWEKMA OHLONE TRIBE,	)	
	)	
Plaintiff,	)	
	)	
v.	)	
	)	Civil Action No. 03-1231(RBW)
DIRK KEMPTHORNE, ¹	)	
Secretary of the Interior, <u>et al.</u> ,	)	
	)	
Defendants.	)	
	)	

MEMORANDUM OPINION

The Muwekma Ohlone Tribe (“Muwekma,” “the Tribe,” or “the plaintiff”)² brings this action under the United States Constitution and the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 554, 701-706 (2000), seeking review of the “Final Determination Against Federal Acknowledgment of the Muwekma Ohlone Tribe” (“Final Determination”), 67 Fed. Reg. 58,631 (2002), issued by the Department of the Interior (“DOI” or “the Department”),³ which declined to

¹ Pursuant to Federal Rule of Civil Procedure 25(d)(1), the Court has substituted the Secretary of the Interior, Dirk Kempthorne, for the former Secretary, Gale Norton, as a defendant in this action.

² As a matter of convenience, and in accordance with both parties’ pleadings, the Court will at times throughout this Opinion refer to the plaintiff as “the Tribe.” See Complaint ¶ 1; Answer at 2 n.2. The Court notes, however, that the plaintiff’s status as a Native American tribe within the meaning of the federal acknowledgment criteria is the primary point of contention in this litigation. See Morton v. Mancari, 417 U.S. 535, 553 & n.24 (1974) (stating that for the purposes of federal recognition tribal status is a political rather than racial classification). Accordingly, the Court’s reference to the plaintiff as “the Tribe” is not intended to suggest that the plaintiff is, or should be, entitled to federal tribal recognition.

³ The named defendants are (1) Gale Norton, in her official capacity as the Secretary of the Interior (“Secretary”); (2) Aurene Martin, in her capacity as the Acting Assistant Secretary for Indian Affairs; and (3) the Department of the Interior (collectively “the defendants”). As noted supra, Dirk Kempthorne has been substituted for Gale Norton pursuant to Rule 25(d)(1). In addition, Aurene Martin is no longer the Acting Assistant Secretary for Indian Affairs, and the position is currently vacant.

grant federal recognition to Muwekma as a Native American tribe pursuant to the acknowledgment criteria of 25 C.F.R. § 83 (2006) ("Part 83"). Complaint ("Compl.") ¶ 1. Specifically, Muwekma contends, inter alia, that the Department violated the Equal Protection Clause and the APA by requiring it to undergo the Part 83 acknowledgment procedures while allowing similarly situated tribal petitioners to bypass these procedures altogether. Compl. ¶¶ 37-39; Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem.") at 22-30. Currently before the Court are the parties' cross-motions for summary judgment.⁴ For the reasons set forth below, the Court denies both parties' motions without prejudice and directs the Department to supplement the administrative record.

I. Background

The following facts are not in dispute. Muwekma is a group of American Indians indigenous to the San Francisco Bay area, the members of which are direct descendants of the historical Mission San Jose Tribe, also known as the Pleasanton or Verona Band of Alameda County ("the Verona Band"). Pl.'s Mem. at 4; Defs.' Mem. at 5; Answer at 6. From 1914 to 1927, the Verona Band was recognized by the federal government as an Indian tribe. Pl.'s Mem. at 4-5; Defs.' Mem. at 5; Answer at 12-13. Neither Congress nor any executive agency ever formally withdrew federal recognition of the Verona Band. Pl.'s Mem. at 5; Answer at 14.

⁴ The following papers have been submitted in connection with these motions: (1) Points and Authorities in Support of Plaintiff's Motion for Summary Judgment ("Pl.'s Mem."); (2) Memorandum in Support of Defendants' Cross-Motion for Summary Judgment and Response in Opposition to Plaintiffs' Motion for Summary Judgment ("Defs.' Mem."); (3) Reply Brief in Support of Plaintiff's Motion for Summary Judgment and Opposing Defendants' Motion for Summary Judgment ("Pl.'s Opp."); (4) Reply Memorandum in Support of Defendants' Cross-Motion for Summary Judgment ("Defs.' Reply"); (5) Plaintiff's Notice of Supplemental Authority ("Pl.'s Not."); (6) Defendants' Response to Plaintiff's Filing of Supplemental Authority ("Defs.' Resp."); (7) Plaintiff's Second Notice of Supplemental Authority ("Pl.'s Second Not."); (8) Defendants' Response to Plaintiff's Second Notice of Supplemental Authority ("Defs.' Second Resp."); and (9) Plaintiff's Reply in Support of Second Notice of Supplemental Authority ("Pl.'s Reply to Second Resp.).

H.L.C.
[DRAFT]

April 13, 2000
106th CONGRESS
2nd Session
H. R. ____

IN THE HOUSE OF REPRESENTATIVES

Mr. George Miller of California introduced the following bill; which was referred to the Committee on _____

A BILL

To restore Federal recognition to certain California Indian tribes, address the special land needs of the California Indians, establish equitable treatment of California Indians in the programs and services of the Bureau of Indian Affairs, develop adequate California tribal justice systems, and for other purposes.
Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- (a) Short Title.--This Act may be cited as the "California Indian Act of 2000".
(b) Table of Contents.--The table of contents for this Act is as follows:

- Sec. 1. Short title; table of contents.
Sec. 2. Findings and purpose.
Sec. 3. Policy.
Sec. 4. Definitions.

TITLE I--RESTORATION OF TERMINATED CALIFORNIA INDIAN TRIBES

- Sec. 101. Definitions.
Sec. 102. Restoration of Federal recognition, rights, and privileges of the Tribes.
Sec. 103. Economic development.
Sec. 104. Transfer of land to be held in trust.
Sec. 105. Membership rolls.
Sec. 106. Interim government.
Sec. 107. Tribal constitution.

TITLE VII--MISCELLANEOUS PROVISIONS

Sec. 701. Contract authority.

Sec. 702. Certain land and facilities held in trust for the California Indians.

Sec. 703. Savings provisions.

SEC. 2. FINDINGS AND PURPOSE.

(a) Findings.--Congress finds that--

- (1) the Advisory Council on California Indian Policy, pursuant to the Advisory Council on California Indian Policy Act of 1992 (Public Law 10209416; 25 U.S.C. 651 note), submitted its proposals and recommendations regarding remedial measures to address the special status of California's terminated and unacknowledged Indian tribes and the needs of California Indians relating to economic self-sufficiency, health, and education;
- (2) in the Advisory Council on California Indian Policy Extension Act of 1998 (Public Law 10509294), the Congress directed the Council to work with the Congress, the Secretaries of the Interior and Health and Human Services, and the California Indian tribes to implement the Council's proposals and recommendations contained in its report to Congress, including presenting draft legislation to Congress for implementation of the recommendations requiring legislative changes.
- (3) California Indian tribes cannot effectively exercise sovereignty or self-determination without a land base large enough to develop economically and provide for the basic needs of tribal members, including adequate housing, employment, and social welfare services;
- (4) as a result of their uniquely tragic history, California Indian tribes do not have a land base that is adequate to meet their immediate and essential needs for housing, economic development, and cultural and natural resource protection and preservation;
- (5) although a large number of California Indian tribes negotiated 18 treaties with the United States in the early 1850's that would have set aside approximately 8,500,000 acres as their tribal homelands, the United States Senate failed to ratify these treaties;
- (6) the Senate's failure to ratify the California Indian treaties, in conjunction with Congress' passage of the 1851 Land Claims Act which required those claiming interests in California lands to file their claim within 2 years or forever forfeit such claim, denied California Indians any legally cognizable claim to their ancestral lands;
- (7) most California Indians were rendered homeless by these Federal actions, a situation that remained unremedied for many years until the United States

and early 1860's by military and volunteer patrols that resulted either in their death, removal to the Hoopa Valley Reservation or hiding in the hills. However, a few years later the Tsnungwe returned to their aboriginal lands where they have remained ever since.

(4) The Muwekma are the aboriginal inhabitants of the southern, eastern, and western regions of the San Francisco Bay Area, including all of what is now San Francisco, San Mateo, Alameda, and Contra Costa Counties, much of what is now Santa Clara County, and parts of Santa Cruz, San Joaquin, Napa, and Solano Counties. The Muwekma Indians are from the following aboriginal tribes: Passasimi/Yatikumne, Tamcan, Josemite, Lacquisemne, Julpun, Napian/Karkin, Jalquin/Yrgin, Alson/Tamien, Suenen, Chupcan, Choquoime, and Nototomne. Spanish missionaries forced the ancestors of the Muwekma Tribe into the Missions Dolores, San Jose, and Santa Clara in the late 18th and early 19th centuries. In the 1830's the Mexican Government secularized the missions and distributed their lands. Many Muwekma left the missions and resettled in other parts of the Bay Area, including on 20a number of rancherias in Alameda County, including the Alisal Rancheria near Pleasanton, the Del Mocho Rancheria in Livermore, the El Molino Rancheria in Niles, as well as on rancherias in Sunol and San Leandro/San Lorenzo until the early part of the 20th century. The Muwekma people continue to reside in their aboriginal territory in the San Francisco Bay Area.

(5) The Tolowa are the aboriginal inhabitants of the present day county of Del Norte, located in the northwestern corner of California. In this area, their villages were scattered along the coastline, at the Lakes Earl and Tolowa, and along the larger tributaries of the Smith and Winchuck Rivers. The Tolowa signed a treaty with the United States on August 17, 1857, and were removed to the Klamath Reservation that same year. They were subsequently moved to the Smith River Reserve until it was discontinued on May 3, 1862, and thereafter moved several more times, including to the Siletz Indian Reservation in Oregon and to the Round Valley, Hoopa, and Klamath Reservations in California. Documents of the Bureau of Indian Affairs from 1915 through 1916 show that 100 acres of land was to be purchased for the Lake Earl (Tolowa) Indians and the Lipps-Michaels Survey of Landless Nonreservation Indians of California, 1919-1920, confirms such a purchase of 100 acres of undivided land near Crescent City, Del Norte County, for these Indians.

(6) The Southern Sierra Miwuk Nation is composed of several bands or groups of Indians of the Yosemite/Mariposa area. These bands or groups are mentioned in countless official letters and journals of the United States Commissioners who were charged by Congress to negotiate treaties with the California Indian tribes during the period 1851-1852. The first treaty camp was Camp Fremont, just northwest of Mariposa, California. The second treaty camp was Camp Barbour, south of Mariposa in the Millerton Lake area. Some of the Southern Sierra Miwuk bands or groups that signed the treaties or were mentioned in the

From: [Lisjan Nation](#)
To: [Miranda Aguilar](#)
Subject: Re: Tribal Consultation Letter - NOP
Date: Tuesday, July 9, 2024 6:43:57 PM

Caution: This is an external email. Please take care when clicking links or opening attachments.

Miranda,

Thank you for your email. The Tribe would like to consult on this project. Please click our Calendly link below to schedule a consultation at your convenience. Please make sure to include the project name in the notes section when scheduling the consultation to help us prepare for our meeting.

Access our Calendly here:

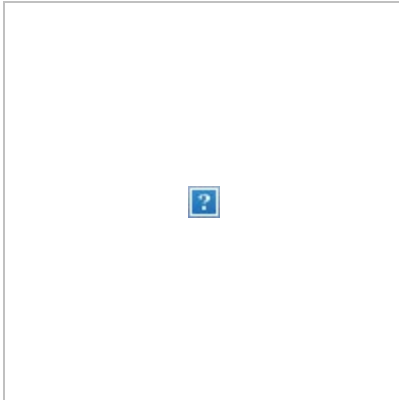
<https://calendly.com/cvltribe/consultation>

If you have any Cultural Resources reports, CHRIS records searches, draft EIR documents, or SLF results from the NAHC that you can share in advance of the meeting, that would be very helpful.

'Uni (Respectfully),

Lucy Gill, Cultural Resource Manager II

Confederated Villages of Lisjan Nation



On Fri, Jul 5, 2024 at 5:03 PM Miranda Aguilar <Miranda.Aguilar@cityoftracy.org> wrote:

Hello Everyone,

Please see attached for a PDF version of a Tribal Consultation Letter that was sent out by certified mail on 6/20/24.

Please let us know if you have any questions/comments.

Thank you,

Miranda Aguilar | City of Tracy

Administrative Assistant

Community & Economic Development – Planning Division

333 Civic Center Plaza | Tracy, CA 95376

Office: (209) 831.6421 | Miranda.Aguilar@cityoftracy.org





Christina Erwin <cerwin@denovoplanning.com>

Tracy Rezones Scoping comment

1 message

Ben Ritchie <britchie@denovoplanning.com>

Thu, Jul 11, 2024 at 2:36 PM

To: William Crenshaw <wcrenshaw@denovoplanning.com>, Christina Erwin <cerwin@denovoplanning.com>

We received one verbal comment at the scoping meeting last night. My notes are below:

Robert Tanner: Aesthetics and Wildlife should be addressed in EIR. Hazards, water quality, energy and LU and Planning should also be included. Hazards in Bow Tie should be studied due to hazards already existing. Request for ordinance changes to require more affordable housing in development proposals.

--

Ben Ritchie | Principal

De Novo Planning Group | www.denovoplanning.com

britchie@denovoplanning.com | 916.949.3231

Northern California | [1020 Suncast Ln #106](#) | El Dorado Hills, CA 95762

Southern California | 180 East Main St. #108 | Tustin, CA 92780

July 12, 2024

Craig Hoffman, Senior Planner
City of Tracy
333 Civic Center Plaza
Tracy, California 95376

Dear Mr. Hoffman:

I am writing in response to the Notice of Preparation (NOP) of the Environmental Impact Report (EIR) for the City of Tracy Rezone Program and General Plan Amendment project. The California Air Resources Board (CARB) works to support the State's long-term climate goals by engaging with local jurisdictions and lead agencies as they evaluate the greenhouse gas (GHG) impacts of new development during the California Environmental Quality Act (CEQA) process. Specifically, CARB encourages new residential and mixed-use development to demonstrate consistency with the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan).¹ As noted in Appendix D, Local Actions, of the 2022 Scoping Plan (Appendix D), "Local government efforts to reduce greenhouse gas (GHG) emissions within their jurisdiction are critical to achieving the State's long-term climate goals."

In order to accommodate the City's Regional Housing Needs Assessment (RHNA) units, the project would rezone opportunity sites to ensure the ability to develop housing at specified densities. When assessing GHG impacts in the CEQA document to be prepared for this project, CARB recommends that the evaluation include a robust discussion of how the project will promote consistency with the recommendations in Appendix D of CARB's Scoping Plan. Appendix D identifies three priority areas for local government actions. These areas represent GHG reduction opportunities over which local governments have the most authority, as well as having the highest potential for meaningful GHG reductions. These three priority areas are:

- Reduction in vehicle miles traveled (VMT)
- Transportation electrification
- Building decarbonization

Table 3 of Appendix D recommends a combination of key project attributes that have a demonstrated ability to reduce GHG from residential and mixed-use development in each priority area. These project attributes promote a broad range of transportation alternatives, compact development patterns, energy efficiency, and incorporate equity and environmental justice. CARB suggests that the GHG analysis in the upcoming environmental

¹ <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

review document closely examine how these project attributes will be encouraged in new residential development that will be affected by the project. Table 3 is shown below:

Table 3 - Key Residential and Mixed-Use Project Attributes that Reduce GHGs

Priority Areas	Key Project Attributes
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer)
	Does not result in the loss or conversion of natural and working Lands
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), <u>or</u> Is in proximity to existing transit stops (within a half mile), <u>or</u> Satisfies more detailed and stringent criteria specified in the region's SCS
	Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or

	For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.
	At least 20 percent of units included are affordable to lower-income residents
	Results in no net loss of existing affordable units
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking

CARB appreciates the opportunity to provide early feedback to the City of Tracy on the upcoming environmental review for the City of Tracy Rezone Program and General Plan Amendment project. The project presents the City with opportunities to promote development that will be both sustainable and equitable for its citizens. If you have any questions about this letter or would like to meet with CARB staff, please feel free to contact Pedro Peterson at (279) 208-7367 or by email at pedro.peterson@arb.ca.gov.

Sincerely,

Annalisa Schilla

Annalisa Schilla, Ph.D., Assistant Division Chief, Sustainable Transportation and Communities Division, California Air Resources Board

cc: Pedro Peterson, Manager, Sustainable Transportation and Communities Division,
Transportation & Land Use Planning Branch, Local Planning Section



November 7, 2023

VIA E-MAIL AND
FIRST CLASS MAIL

Honorable Mayor & Councilmembers
City of Tracy
333 Civic Center Plaza
Tracy, CA 95376
PublicComment@CityOfTracy.org

Senior Planner Alan Bell
City of Tracy
333 Civic Center Plaza
Tracy, CA 95376
alan.bell@cityoftracy.org

Re: Tracy Hills' Comments on Draft Housing Element

Dear Honorable Mayor, Councilmembers & Mr. Bell:

This letter is being sent on behalf of Integral Communities and its various affiliates ("Tracy Hills"), the current owner of those properties generally referred to as the Tracy Hills Project (or "Property"), and is being sent in response to the Draft Housing Element that was circulated in early October 2023.

As an initial matter, I would like to state my appreciation for allowing the public to comment on this draft as Tracy Hills looks forward to working with the City to help meet its housing goals and mandates. However, while we commend the City for delaying consideration of the housing element to conduct additional public workshops this past summer, as required by the City Attorney, as explained below, Tracy Hills wishes that City Staff had more direct and open communication with us specifically regarding the Draft Housing Element issues and opportunities in regards to Tracy Hills.

In particular, the Draft Housing Element identifies five properties as opportunity sites that are owned by Tracy Hills and are supposedly going to be rezoned to accommodate higher levels of residential density.¹ However, these properties are subject to a Development Agreement between the City and Tracy Hills, and as such, these new zoning restrictions would not be applicable to those five properties. Therefore, it is improper to rely on those sites to provide the levels of density that the Draft Housing Element appears to assume will be accommodated at those sites within the upcoming housing element cycles.

This is not to say that Tracy Hills is not willing to work with the City, but these issues do need to be addressed to avoid any miscommunication in the future.

¹ APN 25105009, 25106016, 25337001, 25338052, and 25338053.

Honorable Mayor & Councilmembers
 Senior Planner Alan Bell
 November 7, 2023 Page 2

1. The Draft Housing Element Must Be Revised to Reflect the Existence of the Development Agreement that Applies to the Tracy Hills Parcels

The Draft Housing Element should be revised to omit any Tracy Hills property that is subject to the Development Agreement entered into by the City of Tracy, effective May 19, 2016 (San Joaquin County Recorder No. 2016-066658) (the “Development Agreement”). The Development Agreement vested the property owners with the right to develop those properties in accordance with the zoning regulations that existed at that time, meaning those properties cannot be required to be developed in accordance with the newly proposed densities during the current planning period. Accordingly, including those properties in the Draft Housing Element’s site inventory list is improper.

Per Government Code § 65583.2, the City is required to analyze and explain how the properties that are included in the site inventory list can accommodate the development of the City’s RHNA allocation during this current “planning period.” (See Gov’t Code §§ 65583.2 (a), (c).) HCD states that this Sixth Cycle will run from December 31, 2023 to December 31, 2031. Accordingly, the City is required to include only those sites that will realistically be developed at the desired densities by no later than December 31, 2031.

Additionally, when designating a site as an opportunity site, the City is required to explain how a site can be developed to accommodate the contemplated densities after taking into account any potential “land use controls,” as well as the “realistic development capacity for the site,” with the goal to show that the identified sites can realistically be developed at those density levels during this planning period. (See Gov’t Code 65583.2(c)(2).) Here, it is apparent the City failed to conduct this analysis by ignoring the existence of the Development Agreement, which makes it unlikely if not legally impossible to do.

As you are likely aware, the Development Agreement applies to approximately 1,843 acres of real property in the Tracy Hills Specific Plan. (See Development Agreement, Recital D.) Per the terms of the Development Agreement, it is intended to last for a total of 25 years at minimum, with an outside date of May 19, 2041. (See Development Agreement, § 2.1.) Further, the Development Agreement states Tracy Hills has the “vested right to develop the property in accordance with the Existing Rules, Project Approvals and any Subsequent Approvals.” (§ 3.1(a).) The “Existing Rules,” in turn, are defined as the “City’s General Plan, the Specific Plan, the City’s Municipal Code, all Citywide Infrastructure Master Plans, and all other adopted City ordinances, resolutions, rules, regulations, guidelines and policies ***in effect on the Effective Date.***” (§ 1.29.)

In short, under the terms of the Development Agreement, the City cannot require Tracy Hills to comply with any new zoning regulations that conflict with the “Existing Rules” for the life of the Development Agreement – i.e. until May 19, 2041. This means that even if the City were to ultimately rezone the Tracy Hills properties, such a rezoning would be ineffective as against

Honorable Mayor & Councilmembers
Senior Planner Alan Bell
November 7, 2023 Page 3

Tracy Hills, which would retain the vested right to develop those sites at lower densities per the “Existing Rules.”

Despite the existence of this Development Agreement, and the existence of Tracy Hills vested rights to develop those properties, the Draft Housing Element has identified five separate parcels in its site inventory list (see Table B), as opportunity sites, that will supposedly accommodate a total of 520 of low income units. (See Draft Housing Element, p. D-7.) In particular the five parcels are subject to the Tracy Hills Specific Plan, and are zoned as follows:

- APN 25105009 – 10-acre portion of larger parcel currently zoned Medium Density Residential – Tracy Hills
- APN 25106016 – 9.7 acre parcel currently zoned High Density Residential – Tracy Hills
- APN 25337001 – 2.1-acre parcel currently zoned High Density Residential – Tracy Hills
- APN 25338052 – 7.7-acre parcel currently zoned Mixed Use Business Park-Tracy Hills
- APN 25338053 – 3.3-acre parcel currently zoned Mixed Use Business Park-Tracy Hills

Each of these five parcels are covered by the Development Agreement. Accordingly, they should be removed from the Draft Housing Element’s site inventory list because they will not be required to comply with the City’s proposed zoning regulations until after May 2041, i.e. outside of the relevant planning period.

Additionally, the Draft Housing Element’s description of APN 25106016 is incorrect, because that parcel is much larger, and is subject to different zoning designations than what is reflected in the Draft Housing Element. At a minimum, the Draft Housing Element should be revised to refer to the right acreage and proper zoning designation.

2. Tracy Hills Remains Willing to Offer the Entirety of APN 25105009 to the City to be Developed As Affordable Housing

Tracy Hills previously reached out to City staff as they were drafting the Draft Housing Element, and offered to provide the entire 26.9-acre site located at 28281 North Lammers Road

Honorable Mayor & Councilmembers
Senior Planner Alan Bell
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(APN 25105009) (the “Triangle Property”)² as an opportunity site to help the City meet its RHNA allocation, in exchange for avoiding having to designate other parcels within the Tracy Hills Project area and to meet any future affordable housing requirements Integral Communities owned or controlled lands. However, at that time, City staff informed us that they were instructed to not entertain that proposal at that time.³

That being said, Tracy Hills believes that this arrangement can benefit the City, Tracy Hills and the public in general. If Tracy Hills were to transfer ownership of the Triangle Property to the City, it would have complete control over how the property was ultimately developed, and can even look for affordable housing developers to help accomplish this goal.

Additionally, agreeing to this transfer will allow the City to designate the entire Triangle Property as HDR, giving it the potential to accommodate 538 lower-income units, which would offset the units that will be lost when the remaining Tracy Hills properties are removed from the site inventory list.

Accordingly, Tracy Hills respectfully requests that the City Council direct staff to further confer with Tracy Hills, so that we may continue to work through this potential strategy.

3. Concluding Remarks

Tracy Hills is willing to continue to discuss these important issues with the City as partners as this process moves forward. However, due to the timing restrictions, we felt it was important to raise these issues now. Please feel free to contact me with any questions or clarifications you may have.

John Stanek

John Stanek

² Due to the site’s triangular appearance, City staff and Tracy Hills have colloquially referred to this property as the Triangle Property. (See, e.g., Draft Housing Element, p. IV-16.)

³ It is unclear if this offer was ever relayed from City Staff to the City Council.



SAN JOAQUIN
—COUNTY—
Greatness grows here.

Environmental Health Department

Jasjit Kang, REHS, Director

Muniappa Naidu, REHS, Assistant Director

PROGRAM COORDINATORS

Jeff Carruesco, REHS, RDI

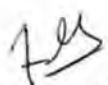
Willy Ng, REHS

Steven Shih, REHS

Elena Manzo, REHS

Natalia Subbotnikova, REHS

July 23, 2024

To: City of Tracy
From: Frank Girardi; 209-468-3420 
Lead Senior Registered Environmental Health Specialist
RE: **NOP 24-0017, Referral, SU-2400055; Notice of Preparation and Scoping Meeting for the Draft Environmental Impact Report for City of Tracy Rezone Program and General Plan Amendment**

The San Joaquin County Environmental Health Department (EHD) is supportive of this project in regards to the provision of full public services and has no comments at this time.

August 14, 2024

Craig Hoffman
City of Tracy
Planning Department
333 Civic Center Plaza
Tracy, CA 95376

Project: Notice of Preparation of an Environmental Impact Report for the City of Tracy Rezone Program and General Plan Amendment

District CEQA Reference No: 20240710

Dear Mr. Hoffman,

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Notice of Preparation (NOP) of a Subsequent Environmental Impact Report (SEIR) from the City of Tracy (City) for the Rezone Program and General Plan Amendment Project. Per the NOP, the project consists of accommodations to the City's Regional Housing Needs Allocation (RHNA) in the form of zoning amendments and zoning code revisions to support the housing goals, minor amendments to the City's General Plan to update Land Use, Safety, and Circulation Elements, in addition to the introduction of a new General Plan Element for the topic of Environmental Justice consistent with State planning law (Project). The Project represents development growth of up to 21,355 dwelling units and covers planning areas within the City of Tracy, CA.

The Project is a plan level project and, while project-specific data may not be available until specific approvals are being granted, the SEIR should include a discussion of policies, which when implemented, will reduce or mitigate impacts on air quality at the individual project level.

The District offers the following comments at this time regarding the Project:

1) Project Siting

The Rezone and General Plan Amendment Project is the blueprint for future growth and provides guidance for the community's development. Without appropriate mitigation and associated policy, future development projects within the Project area may contribute to negative impacts on air quality due to increased traffic and

Samir Sheikh
Executive Director/Air Pollution Control Officer

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4800 Enterprise Way
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Southern Region
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Bakersfield, CA 93308-9725
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ongoing operational emissions. Appropriate project siting helps ensure there is adequate distance between differing land uses, which can prevent or reduce localized and cumulative air pollution impacts from business operations that are in close proximity to receptors (e.g., residences, schools, health care facilities, etc.). Guidance and policies used to implement the Rezone and General Plan Amendment Project should include measures and concepts outlined in the following resources:

- CARB's Air Quality and Land Use Handbook: A Community Health Perspective. The document includes tables with recommended buffer distances associated with various types of common sources (e.g., distribution centers, chrome platers, gasoline dispensing facilities, etc.), and can be found at: <https://ww2.arb.ca.gov/our-work/programs/resource-center/strategy-development/land-use-resources>
- CARB's Freight Handbook Concept Paper: This document compiles best practices designed to address air pollution impacts, which may apply to the siting, design, construction, and operation of freight facilities to minimize health impacts on nearby communities, and can be found at: https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf

2) Project Related Emissions

The District recommends that the SEIR stipulate that future development projects within the Rezone and General Plan Amendment Project identify and characterize project construction and operational air emissions. The District recommends the air emissions be compared to the District significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: <https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf>. The District recommends that future projects be mitigated to the extent feasible, and that future projects with air emissions above the aforementioned thresholds be mitigated to below these thresholds.

As such, the SEIR should include a discussion of policies, which when implemented, will require assessment and characterization of project-level emissions, and subsequently require mitigation of air quality impacts to the extent feasible at the individual project-specific level. Environmental reviews of potential impacts on air quality should incorporate the following items:

2a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, that future development projects within the Rezone and General Plan Amendment Project should utilize the cleanest available off-road construction equipment.

2b) Operational Emissions

Operational (ongoing) air emissions from mobile sources and stationary sources should be analyzed separately. For reference, the District's significance thresholds are identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts:

<https://ww2.valleyair.org/media/g4nl3p0q/gamaqi.pdf>.

Recommended Mitigation Measure: At a minimum, project related impacts on air quality should be reduced to levels below the District's significance thresholds through incorporation of design elements such as the use of cleaner Heavy Heavy-Duty (HHD) trucks and vehicles, measures that reduce Vehicle Miles Traveled (VMTs), and measures that increase energy efficiency. More information on transportation mitigation measures can be found at:

<https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf>

2c) Recommended Model for Quantifying Air Emissions

Project-related criteria pollutant emissions from construction and operational sources should be identified and quantified. Emissions analysis should be performed using the California Emission Estimator Model (CalEEMod), which uses the most recent CARB-approved version of relevant emissions models and emission factors. CalEEMod is available to the public and can be downloaded from the CalEEMod website at: www.caleemod.com.

3) Health Risk Screening/Assessment

For future development projects, the City should evaluate the risk associated with the Project for sensitive receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) in the area and mitigate any potentially significant risk to help limit exposure of sensitive receptors to emissions.

To determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) a Prioritization and/or a Health Risk Assessment (HRA) should be performed for future development projects. These health risk determinations should quantify and characterize potential Toxic Air Contaminants (TACs) identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):

A "Prioritization" is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association's (CAPCOA) methodology. Please contact the District for assistance with performing a Prioritization analysis.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

Health Risk Assessment:

Prior to performing an HRA, it is strongly recommended that land use agencies/project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA.

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the health impacts would exceed the District's established risk thresholds, which can be found here:

<https://ww2.valleyair.org/permitting/ceqa/>.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

Recommended Measure: Development projects resulting in TAC emissions should be located an adequate distance from residential areas and other sensitive receptors to prevent the creation of a significant health risk in accordance to CARB's Air Quality and Land Use Handbook: A Community Health Perspective located at <https://ww2.arb.ca.gov/our-work/programs/resource-center/strategy-development/land-use-resources>.

4) Ambient Air Quality Analysis

An Ambient Air Quality Analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. The District recommends an AAQA be performed for any future development projects with emissions that exceed 100 pounds per day of any pollutant.

An acceptable analysis would include emissions from both project-specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website:
<https://ww2.valleyair.org/permitting/ceqa/>.

5) Voluntary Emission Reduction Agreement

Future development projects within the Project area could have a significant impact on air quality. The District recommends the SEIR include a feasibility discussion on implementing a Voluntary Emission Reduction Agreement (VERA) as a mitigation measure.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of agricultural equipment with the latest generation technologies.

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is

compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

6) Clean Lawn and Garden Equipment in the Community

Since the Project consists of residential development, gas-powered residential lawn and garden equipment have the potential to result in an increase of NOx and PM2.5 emissions. Utilizing electric lawn care equipment can provide residents with immediate economic, environmental, and health benefits. The District recommends the Project proponent consider the District's Clean Green Yard Machines (CGYM) program which provides incentive funding for replacement of existing gas powered lawn and garden equipment. More information on the District CGYM program and funding can be found at: <https://ww2.valleyair.org/grants/clean-green-yard-machines-residential/>

7) On-Site Solar Deployment

It is the policy of the State of California that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, the production of solar energy is contributing to improving air quality and public health. The District suggests that the City consider incorporating solar power systems as an emission reduction strategy for future development projects.

8) Electric Infrastructure

To support and accelerate the installation of electric vehicle charging equipment and development of required infrastructure, the District offers incentives to public agencies, businesses, and property owners of multi-unit dwellings to install electric charging infrastructure (Level 2 and 3 chargers). The purpose of the District's Charge Up! Incentive program is to promote clean air alternative-fuel technologies and the use of low or zero-emission vehicles. The District recommends that the City and project proponents install electric vehicle chargers at project sites, and at strategic locations.

Please visit <https://ww2.valleyair.org/grants/charge-up> for more information.

9) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and

Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: <https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations>. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

9a) District Rule 9510 - Indirect Source Review (ISR)

The purpose of District Rule 9510 is to reduce the growth in both NO_x and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NO_x and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Accordingly, future development projects within the Rezone and General Plan Amendment Project may be subject to District Rule 9510 if upon full buildout, the project would equal or exceed any of the following applicability thresholds, depending on the type of development and public agency approval mechanism:

Table 1: ISR Applicability Thresholds

Development Type	Discretionary Approval Threshold	Ministerial Approval / Allowed Use / By Right Thresholds
Residential	50 dwelling units	250 dwelling units
Commercial	2,000 square feet	10,000 square feet
Light Industrial	25,000 square feet	125,000 square feet
Heavy Industrial	100,000 square feet	500,000 square feet
Medical Office	20,000 square feet	100,000 square feet
General Office	39,000 square feet	195,000 square feet
Educational Office	9,000 square feet	45,000 square feet
Government	10,00 square feet	50,000 square feet
Recreational	20,000 square feet	100,000 square feet
Other	9,000 square feet	45,000 square feet

District Rule 9510 also applies to any transportation or transit development projects where construction exhaust emissions equal or exceed two tons of NO_x or two tons of PM.

The purpose of District Rule 9510 is to reduce the growth in both NO_x and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The Rule requires developers to mitigate their NO_x and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

In the case the individual development project is subject to District Rule 9510, per Section 5.0 of the rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency so that proper mitigation and clean air design under ISR can be incorporated into the public agency's analysis.

Information about how to comply with District Rule 9510 can be found online at: <https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview>

The AIA application form can be found online at: <https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/>

District staff is available to provide assistance with determining if future development projects will be subject to Rule 9510, and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

9b) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

Future development projects may be subject to District Rule 4002. This rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Information on how to comply with District Rule 4002 can be found online at: <https://ww2.valleyair.org/compliance/demolition-renovation/>

9c) District Rule 4601 (Architectural Coatings)

Future development projects may be subject to District Rule 4601 since it may utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural

coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at:
<https://ww2.valleyair.org/media/tkgjeusd/rule-4601.pdf>

9d) District Regulation VIII (Fugitive PM10 Prohibitions)

For future development projects, a project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities*.

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

The application for both the Construction Notification and Dust Control Plan can be found online at: <https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx>

Information about District Regulation VIII can be found online at:
<https://ww2.valleyair.org/dustcontrol>

9e) District Rule 4901 - Wood Burning Fireplaces and Heaters

The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices. This rule establishes limitations on the installation of new wood burning fireplaces and wood burning heaters. Specifically, at elevations below 3,000 feet in areas with natural gas service, no person shall install a wood burning fireplace, low mass fireplace, masonry heater, or wood burning heater.

Information about District Rule 4901 can be found online at:
<https://ww2.valleyair.org/compliance/residential-wood-smoke-reduction-program/>

9f) Other District Rules and Regulations

Future development projects may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

10) Future Projects / Land Use Agency Referral Documents

Future development projects may require an environmental review and air emissions mitigation. A project's referral documents and environmental review documents provided to the District for review should include a project summary, the land use designation, project size, air emissions quantifications and impacts, and proximity to sensitive receptors and existing emission sources, and air emissions mitigation measures. For reference and guidance, more information can be found in the District's Guidance for Assessing and Mitigating Air Quality Impacts at: <https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf>

11) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Ryan Grossman by e-mail at Ryan.grossman@valleyair.org or by phone at (559) 230-6569.

Sincerely,

Tom Jordan
Director of Policy and Government Affairs



For: Mark Montelongo
Program Manager

From: Boertien, Andrea@Wildlife <Andrea.Boertien@wildlife.ca.gov>
Sent: Wednesday, August 14, 2024 12:46 PM
To: Craig Hoffman <craig.hoffman@cityoftracy.org>
Subject: RE: Tracy NOP for housing element.

Caution: This is an external email. Please take care when clicking links or opening attachments.

Hello Mr. Hoffman,

I apologize for the time it took to respond to you. I was out of the office, sick. I wanted to respond to you as soon as possible upon my return. Please see CDFW's comments for the City of Tracy Program and General Amendment below. I realize the response is late, but I am sending it anyway in hopes it can be of use as guidance. Please see the response below.

Craig Hoffman, Senior Planner

City of Tracy

333 Civic Center Plaza

Tracy, CA 95376

Craig.hoffman@cityoftracy.org

Subject: City of Tracy Program and General Amendment, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2024060655, San Joaquin County

Dear Mr. Hoffman:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) from the City of Tracy (City) for the City of Tracy Program and General Amendment (Project) and has the following recommendations:

ENVIRONMENTAL SETTING:

CDFW recommends that the CEQA document prepared for the project provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the project area and surrounding lands, including, but not limited to, all rare, threatened, or endangered species (CEQA Guidelines, § 15380). The EIR should describe aquatic habitats, such as wetlands or waters of the U.S. or State, and any sensitive natural communities or riparian habitat occurring on or adjacent to the project site (for sensitive natural communities see: <https://wildlife.ca.gov/Data/VegCAMP/NaturalCommunities#sensitive%20natural%20communities>), and any stream or wetland set back distances the City may require. Fully protected, threatened, or endangered, candidate, and other special-status species and sensitive natural communities that are known to occur or have the potential to occur in or near the project site.

Habitat descriptions and the potential for species occurrence should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, U.S. Fish and Wildlife Service's (USFWS) Information, Planning, and Consultation System, California Aquatic Resources Inventory, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the EIR should adequately assess which special-status species are likely to occur on or near the project site, and whether they could be impacted by the project.

CDFW recommends that prior to Project implementation, surveys be conducted for special-status species with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: <https://www.wildlife.ca.gov/Conservation/Survey-Protocol>.

Botanical surveys for special-status plant species, including those listed by the California Native Plant Society (<http://www.cnps.org/cnps/rareplants/inventory/>), must be conducted during the blooming period for all sensitive plant species potentially occurring within the Project area and require the identification of reference populations. Please refer to CDFW protocols for surveying and evaluating impacts to rare plants available at: <https://www.wildlife.ca.gov/Conservation/Plants>.

IMPACT ANALYSIS AND MITIGATION MEASURES:

Crotch's Bumblebee

While no specific development projects are proposed as part of the Project, CDFW is making the following recommendations regarding bumblebees for projects that will be implemented in the future under the General Plan. Impacts to wildlife and habitat will likely be mitigated by participating in the San Joaquin Multi-Species Conservation and Open Space Plan (SJMSCP). Currently, the SJMSCP does not offer take coverage or mitigation lands for special-status bumblebees. Therefore, CDFW is providing the following recommendations:

Recommended Mitigation Measure 1: Habitat Assessment

CDFW recommends the draft EIR include a thorough habitat assessment for Crotch bumblebee within the Project area and surrounding areas that may be impacted by Project construction and operations. The assessment should be conducted by a qualified entomologist knowledgeable with the life history and ecological requirements of Crotch bumblebee, and include all areas of suitable overwintering, nesting, and foraging habitats.

Suitable habitat includes areas of grasslands and upland scrub that contain requisite habitat elements such as small mammal burrows and forage plants. Potential nest habitat (late February to late October) could contain underground abandoned small mammal burrows, perennial bunch grasses and/or thatched annual grasses, brush piles, old bird nests, dead trees, or hollow logs. Overwintering sites (November through early February) utilized by mated queens in self-excavated hibernacula could be present in soft, disturbed soil, sand, well-drained, or loose soils, under leaf litter or other debris with ground cover requisites such as barren areas, tree litter, bare patches within short grass in areas lacking dense vegetation.

Recommended Mitigation Measure 2: Surveys

The draft EIR should state that pre-construction surveys will be conducted within the Project area and surrounding areas which may be impacted by Project construction and/or operations. CDFW recommends following the guidance outlined in the California Bumble Bee Atlas Habitat surveys- Cali Bumble Bee Atlas – California Bumble Bee Atlas (<https://www.cabumblebeeatlas.org/habitat-surveys.html>).

The peak flying time for Crotch bumblebee is March to August, but bees could be flying anytime between February 1 and October 31. Surveys between March and June are expected to have highest detection probability and are therefore the period recommended for pre-construction surveys. Surveys should be conducted no more than 30 days prior to start of Project construction activities, assessing all areas of suitable habitat for overwintering, nesting and foraging at, and within 100 feet of the proposed work area. Surveys should include a minimum of three survey efforts, over a three-day period within a temperature range of 15C and 30C although bumblebees can fly and forage at near freezing temperatures. If the surveyor suspects Crotch bumble bee detection or occupancy, CDFW should be consulted immediately.

Goals of the surveys should be to potentially identify the bee species through non-take methods (close lens photography), foraging plants, and potential ground nest sites on site. Surveys should include examining flowering vegetation, any potential preferred nectar plants, small mammal burrows, bunch grasses, thatch, brush piles, old bird nests, dead trees, or hollow logs. Survey results, after the

protocol was followed, would be good for one year (until the next flying period season) but a pre-activity survey would still be needed prior to ground-disturbing activities.

Recommended Mitigation Measure 3: Avoidance of Nesting Colonies

CDFW recommends that inactive small mammal burrows and thatched/bunch grasses be avoided whenever feasible. If an inactive burrow may be disturbed by Project activities, it should be resurveyed for Crotch bumble bee presence within seven days prior to the scheduled disturbance. If Crotch bumblebee has been detected during surveys, the qualified entomologist should identify the location of all nests in or adjacent to the Project site. If nests are identified, 45-foot no-disturbance buffer zones should be established around nests to reduce the risk of disturbance or accidental take. If Project activities may result in disturbance or potential take, the qualified entomologist should expand the buffer zone as necessary to prevent disturbance or take.

Recommended Mitigation Measure 4: Take Authorization

If surveys document presence of Crotch bumblebee within the Project area, due to the difficulty of completely avoiding take of individuals of the species, CDFW strongly recommends that the Project proponent apply for an ITP under CESA to provide take authorization for Crotch bumblebee as a covered species.

Recommended Mitigation Measure 5: Compensatory Mitigation

CDFW recommends that the draft EIR include compensatory mitigation for the loss of all suitable Crotch bumble bee habitat. Bumble bee floral resources should be mitigated at a 3:1 ratio for permanent impacts in the absence of information regarding the compensatory mitigation site. Floral resources should be replaced as close to their original location as is feasible. If active Crotch bumble bee nests have been identified and floral resources cannot be replaced within 600 feet of their original location, floral resources should be planted in the most centrally available location relative to identified nests. This location should be no more than 4,900 feet (1.5-km) from any identified nest. Replaced floral resources may be split into multiple patches to meet distance requirements for multiple nests. The draft EIR should state that mitigation lands will be protected in perpetuity under a conservation easement with an endowment established for long-term management of the lands.

If you have any questions, please contact me at the contact information in the signature block below.

Sincerely,

Andrea Boertien

Environmental Scientist

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Fairfield, CA 94534

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Value Science. [Value Scientists!](#)

** A **new user interface for EPIMS** is coming September 23, 2024. The current EPIMS website will undergo a system upgrade and will be **offline/unavailable** September 11, 2024 through September 22, 2024. We appreciate your patience and understanding as we work to improve our system for your benefit. For more information about EPIMS, or if you need help completing your online notification, please visit the CDFW's EPIMS website at: <https://wildlife.ca.gov/Conservation/Environmental-Review/EPIMS>.*

APPENDIX C

Traffic Noise Calculation Inputs and Results

Appendix C: Traffic Noise Calculation Inputs and Results



Appendix C-1
FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 240206
Description: Future Year: No Build
Ldn/CNEL: Ldn
Hard/Soft: Soft

												Contours (ft.) - No			
												Offset			Level, dBA
Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	60 dBA	65 dBA	70 dBA	
1	I-205	West of Eleventh Street	166,621	70	0	30	4.9%	9.7%	65	150	-5	3568	1656	769	75.6
2	I-205	Between Eleventh Street and Corral Hollow	191,351	70	0	30	4.9%	9.7%	65	150	-5	3913	1816	843	76.2
3	I-205	Between Corral Hollow and MacArthur Drive	228,092	70	0	30	4.9%	9.7%	65	150	-5	4399	2042	948	77.0
4	I-205	East of MacArthur Drive	231,582	70	0	30	4.9%	9.7%	65	150	0	4444	2063	957	82.1
5	I-580	North of Corral Hollow	93,168	70	0	30	5.6%	15.3%	65	150	0	2804	1302	604	79.1
6	I-580	South of Corral Hollow	71,287	70	0	30	5.6%	15.3%	65	150	0	2346	1089	505	77.9
7	Grant Line Road	West of Corral Hollow	31,105	85	0	15	1.0%	1.0%	40	75	0	259	120	56	68.1
8	Grant Line Road	East of Corral Hollow	14,130	85	0	15	1.0%	1.0%	40	75	-5	153	71	33	59.6
9	Grant Line Road	East of Tracy Boulevard	9,905	85	0	15	1.0%	1.0%	40	75	-5	121	56	26	58.1
10	Grant Line Road	East of Chrisman Road	1,796	85	0	15	1.0%	1.0%	25	75	-5	21	10	4	46.6
11	Eleventh Street	East of Lammers Road	37,348	85	0	15	1.0%	1.0%	45	75	-5	355	165	76	65.1
12	Eleventh Street	East of Corral Hollow	42,917	85	0	15	1.0%	1.0%	35	75	-5	259	120	56	63.1
13	Eleventh Street	East of MacArthur Drive	21,836	85	0	15	1.0%	1.0%	45	75	-5	248	115	53	62.8
14	Schulte Road	West of Corral Hollow	12,757	85	0	15	1.0%	1.0%	40	75	-5	143	66	31	59.2
15	Schulte Road	East of Corral Hollow	23,193	85	0	15	1.0%	1.0%	40	75	-5	213	99	46	61.8
16	Schulte Road	East of Tracy Boulevard	15,514	85	0	15	1.0%	1.0%	40	75	-5	163	76	35	60.0
17	Schulte Road	East of MacArthur Drive	3,156	85	0	15	1.0%	1.0%	40	75	-5	56	26	12	53.1
18	Valpico Road	East of Tracy Boulevard	7,203	85	0	15	1.0%	1.0%	40	75	-5	98	45	21	56.7
19	Valpico Road	East of MacArthur Drive	8,742	85	0	15	1.0%	1.0%	45	75	-5	135	63	29	58.8
20	Linne Road	East of Corral Hollow	18,366	85	0	15	1.0%	1.0%	50	75	-5	264	123	57	63.2
21	Linne Road	East of Tracy Boulevard	13,350	85	0	15	1.0%	1.0%	50	75	-5	214	99	46	61.8
22	Lammers Road	South of Byron Rd.	927	85	0	15	1.0%	1.0%	40	75	-5	25	12	5	47.8
23	Lammers Road	South of Eleventh Street	1,841	85	0	15	1.0%	1.0%	35	75	-5	32	15	7	49.4
24	Lammers Road	North of Valpico Road	15,690	85	0	15	1.0%	1.0%	35	75	-5	132	61	29	58.7
25	Corral Hollow Road	South of Grant Line Road	28,724	85	0	15	1.0%	1.0%	40	75	-5	245	114	53	62.7
26	Corral Hollow Road	South of Eleventh Street	38,133	85	0	15	1.0%	1.0%	45	75	-5	360	167	78	65.2
27	Corral Hollow Road	South of Schulte Road	19,213	85	0	15	1.0%	1.0%	40	75	-5	188	87	40	61.0
28	Corral Hollow Road	North of Valpico Road	8,918	85	0	15	1.0%	1.0%	40	75	-5	112	52	24	57.6
29	Tracy Boulevard	North of Grant Line Road	25,982	85	0	15	1.0%	1.0%	35	75	-5	185	86	40	60.9
30	Tracy Boulevard	South of Grant Line Road	31,789	85	0	15	1.0%	1.0%	35	75	-5	212	98	46	61.8
31	Tracy Boulevard	North of Eleventh Street	27,549	85	0	15	1.0%	1.0%	35	75	-5	193	89	42	61.1
32	Tracy Boulevard	South of Eleventh Street	24,413	85	0	15	1.0%	1.0%	40	75	-5	220	102	47	62.0
33	Tracy Boulevard	North of Schulte Road	11,712	85	0	15	1.0%	1.0%	40	75	-5	135	63	29	58.8
34	Tracy Boulevard	South of Schulte Road	29,782	85	0	15	1.0%	1.0%	45	75	-5	305	142	66	64.1
35	Tracy Boulevard	South of Valpico Road	19,454	85	0	15	1.0%	1.0%	45	75	-5	230	107	50	62.3
36	MacArthur Drive	South of I-205	12,474	85	0	15	1.0%	1.0%	40	75	-5	141	65	30	59.1
37	MacArthur Drive	South of Grant Line Road	6,636	85	0	15	1.0%	1.0%	40	75	0	92	43	20	61.4
38	MacArthur Drive	South of Eleventh Street	5,435	85	0	15	1.0%	1.0%	40	75	-5	81	38	17	55.5
39	MacArthur Drive	North of Valpico Road	2,120	85	0	15	1.0%	1.0%	40	75	-5	43	20	9	51.4
40	MacArthur Drive	South of Valpico Road	2,929	85	0	15	1.0%	1.0%	45	75	-5	65	30	14	54.1
41	Chrisman Road	South of Eleventh Street	14,517	85	0	15	1.0%	1.0%	45	75	-5	189	88	41	61.0
42	Chrisman Road	South of Schulte Road	15,900	85	0	15	1.0%	1.0%	50	75	-5	240	111	52	62.6
43	Byron Road	West of Corral Hollow Rd.	4,850	85	0	15	1.0%	1.0%	45	75	-5	91	42	20	56.3
44	Corral Hollow Road	North of Grant Line Road	14,973	85	0	15	1.0%	1.0%	35	75	-5	128	60	28	58.5
45	Lammers Road	South of Valpico Road	35,578	85	0	15	1.0%	1.0%	35	75	-5	229	106	49	62.3
46	Corral Hollow Road	South Valpico Road	4,780	85	0	15	1.0%	1.0%	25	75	-5	40	18	9	50.9

Appendix C-2
FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 240206
Description: Future Year: Build
Ldn/CNEL: Ldn
Hard/Soft: Soft

												Contours (ft.) - No			
												Offset			Level, dBA
Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	60 dBA	65 dBA	70 dBA	
1	I-205	West of Eleventh Street	169,548	70	0	30	4.9%	9.7%	65	150	-5	3610	1675	778	75.7
2	I-205	Between Eleventh Street and Corral Hollow	188,153	70	0	30	4.9%	9.7%	65	150	-5	3869	1796	834	76.2
3	I-205	Between Corral Hollow and MacArthur Drive	223,347	70	0	30	4.9%	9.7%	65	150	-5	4338	2013	935	76.9
4	I-205	East of MacArthur Drive	227,521	70	0	30	4.9%	9.7%	65	150	0	4392	2038	946	82.0
5	I-580	North of Corral Hollow	92,674	70	0	30	5.6%	15.3%	65	150	0	2794	1297	602	79.1
6	I-580	South of Corral Hollow	69,452	70	0	30	5.6%	15.3%	65	150	0	2306	1070	497	77.8
7	Grant Line Road	West of Corral Hollow	31,533	85	0	15	1.0%	1.0%	40	75	0	261	121	56	68.1
8	Grant Line Road	East of Corral Hollow	13,503	85	0	15	1.0%	1.0%	40	75	-5	148	69	32	59.4
9	Grant Line Road	East of Tracy Boulevard	9,923	85	0	15	1.0%	1.0%	40	75	-5	121	56	26	58.1
10	Grant Line Road	East of Chrisman Road	1,738	85	0	15	1.0%	1.0%	25	75	-5	20	9	4	46.5
11	Eleventh Street	East of Lammers Road	36,422	85	0	15	1.0%	1.0%	45	75	-5	349	162	75	65.0
12	Eleventh Street	East of Corral Hollow	42,335	85	0	15	1.0%	1.0%	35	75	-5	257	119	55	63.0
13	Eleventh Street	East of MacArthur Drive	21,880	85	0	15	1.0%	1.0%	45	75	-5	248	115	54	62.8
14	Schulte Road	West of Corral Hollow	12,072	85	0	15	1.0%	1.0%	40	75	-5	138	64	30	59.0
15	Schulte Road	East of Corral Hollow	22,580	85	0	15	1.0%	1.0%	40	75	-5	209	97	45	61.7
16	Schulte Road	East of Tracy Boulevard	15,836	85	0	15	1.0%	1.0%	40	75	-5	165	77	36	60.1
17	Schulte Road	East of MacArthur Drive	4,252	85	0	15	1.0%	1.0%	40	75	-5	69	32	15	54.4
18	Valpico Road	East of Tracy Boulevard	7,207	85	0	15	1.0%	1.0%	40	75	-5	98	45	21	56.7
19	Valpico Road	East of MacArthur Drive	8,932	85	0	15	1.0%	1.0%	45	75	-5	137	63	29	58.9
20	Linne Road	East of Corral Hollow	18,896	85	0	15	1.0%	1.0%	50	75	-5	269	125	58	63.3
21	Linne Road	East of Tracy Boulevard	13,178	85	0	15	1.0%	1.0%	50	75	-5	212	98	46	61.8
22	Lammers Road	South of Byron Rd.	905	85	0	15	1.0%	1.0%	40	75	-5	24	11	5	47.7
23	Lammers Road	South of Eleventh Street	1,815	85	0	15	1.0%	1.0%	35	75	-5	31	15	7	49.3
24	Lammers Road	North of Valpico Road	15,223	85	0	15	1.0%	1.0%	35	75	-5	130	60	28	58.6
25	Corral Hollow Road	South of Grant Line Road	28,745	85	0	15	1.0%	1.0%	40	75	-5	245	114	53	62.7
26	Corral Hollow Road	South of Eleventh Street	37,481	85	0	15	1.0%	1.0%	45	75	-5	356	165	77	65.1
27	Corral Hollow Road	South of Schulte Road	18,782	85	0	15	1.0%	1.0%	40	75	-5	185	86	40	60.9
28	Corral Hollow Road	North of Valpico Road	8,714	85	0	15	1.0%	1.0%	40	75	-5	111	51	24	57.5
29	Tracy Boulevard	North of Grant Line Road	27,619	85	0	15	1.0%	1.0%	35	75	-5	193	90	42	61.2
30	Tracy Boulevard	South of Grant Line Road	32,338	85	0	15	1.0%	1.0%	35	75	-5	214	100	46	61.8
31	Tracy Boulevard	North of Eleventh Street	27,693	85	0	15	1.0%	1.0%	35	75	-5	193	90	42	61.2
32	Tracy Boulevard	South of Eleventh Street	24,693	85	0	15	1.0%	1.0%	40	75	-5	222	103	48	62.1
33	Tracy Boulevard	North of Schulte Road	12,452	85	0	15	1.0%	1.0%	40	75	-5	140	65	30	59.1
34	Tracy Boulevard	South of Schulte Road	29,882	85	0	15	1.0%	1.0%	45	75	-5	306	142	66	64.2
35	Tracy Boulevard	South of Valpico Road	19,520	85	0	15	1.0%	1.0%	45	75	-5	230	107	50	62.3
36	MacArthur Drive	South of I-205	12,887	85	0	15	1.0%	1.0%	40	75	-5	144	67	31	59.2
37	MacArthur Drive	South of Grant Line Road	6,572	85	0	15	1.0%	1.0%	40	75	0	92	43	20	61.3
38	MacArthur Drive	South of Eleventh Street	4,970	85	0	15	1.0%	1.0%	40	75	-5	76	35	16	55.1
39	MacArthur Drive	North of Valpico Road	2,136	85	0	15	1.0%	1.0%	40	75	-5	43	20	9	51.4
40	MacArthur Drive	South of Valpico Road	3,028	85	0	15	1.0%	1.0%	45	75	-5	66	31	14	54.2
41	Chrisman Road	South of Eleventh Street	16,004	85	0	15	1.0%	1.0%	45	75	-5	202	94	43	61.4
42	Chrisman Road	South of Schulte Road	16,180	85	0	15	1.0%	1.0%	50	75	-5	243	113	52	62.7
43	Byron Road	West of Corral Hollow Rd.	4,566	85	0	15	1.0%	1.0%	45	75	-5	87	41	19	56.0
44	Corral Hollow Road	North of Grant Line Road	14,855	85	0	15	1.0%	1.0%	35	75	-5	128	59	28	58.5
45	Lammers Road	South of Valpico Road	35,211	85	0	15	1.0%	1.0%	35	75	-5	227	105	49	62.2
46	Corral Hollow Road	South Valpico Road	4,786	85	0	15	1.0%	1.0%	25	75	-5	40	18	9	50.9

APPENDIX D

Transportation Data

Memorandum

To: Ben Ritchie
Principal, De Novo Planning Group

From: Ayberk Kocatepe, PhD.
Frederik Venter, PE
Michael Schmitt, AICP CTP, PTP, RSP₁
Asher Cipinko

Re: **DRAFT: City of Tracy Rezone Program and General Plan Amendment**
Transportation Analysis

Date: November 10, 2025

This memorandum documents the California Environmental Quality Act (CEQA) transportation analysis completed for the City of Tracy Rezone Program and General Plan Amendment (“Project” or “proposed Project”) located in San Joaquin County, California. Specifically, this memorandum evaluates how the Project might affect vehicle miles traveled (VMT), active transportation and transit (multimodal), traffic safety, and emergency access. The analyses were completed based on the following checklist items as identified in the 2025 CEQA Statute Guidelines Appendix G Section XVII:

- a) **Multimodal:** Does the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- b) **Vehicle Miles Traveled (VMT):** Does the project conflict or be inconsistent with CEQA Guidelines 15064.3, subdivision (b)?
- c) **Hazards:** Does the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d) **Emergency Access:** Does the project result in inadequate emergency access?

The proposed Rezone Program Update includes plans to accommodate new housing to address the unit shortfall for the 6th Cycle Housing Element Regional Housing Needs Assessment (RHNA) within the City of Tracy. These future land use adjustments are subject to policies in the existing General Plan and the City’s Transportation Master Plan (TMP). The land use totals are summarized in **Table 1** below by scenario.

Table 1 – Land Use Inputs

Scenario	Population	Housing Units	Jobs	Jobs Housing Ratio
2025 Baseline	96,076	29,653	39,883	1.35
Rezone Growth	+21,436	+6,616	--	--
Project 2046 Total Buildout	171,122	61,087	107,166	1.75
Total New Growth over Existing Conditions 2025-2046	+75,046	+31,434	+67,283	--

Sources: De Novo Planning Group, 2024, 2023 San Joaquin County Assessor Data File, Tracy Housing Element Inventory Shapefiles, Tracy Travel Demand Model (Kimley-Horn)

**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 development under the rezone program.*

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 (2025) 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), now referred to as the Office of Land Use and Climate Innovation (LCI), produced a VMT Analysis Guidelines¹ 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 LCI. The City's VMT thresholds consider the VMT performance of residential and non-residential

¹ *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Governor's Office of Planning and Research, State of California. December 2018.

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 land uses*– 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

Land Use Inputs

The following is a summary of project specific considerations related to the analysis of the Tracy Rezone Program:

- 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.
- As shown previously in **Table 1**, 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 2** below shows the cross-reference between the North American Industry Classification System (NAICS) industries and the model employment categories.

Table 2 – 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)

Category	Description and NAICS codes
EMPAGR	Agriculture, Forestry, Fishing and Hunting (11)

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 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**, the thresholds were calculated to be 16.6 VMT per capita for residential uses and 21.6 VMT per employee for employment uses.

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 – Vehicle Miles Traveled (VMT)

Jurisdiction	2046 No Build		2046 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)	105.4%	60.2%	92.2%	62.0%
Over Threshold?	Yes	No	No	No

Table 4 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 4 – 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
2046 No Build	5.5	10.7	22.0	14.7	10.8	14.6	4.1	8.3	4.2
2046 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

VMT Analysis Findings and Mitigation

It was determined that the Tracy Rezone Program will result in a less than significant VMT impact. 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 may influence VMT for specific projects as part of this analysis. The VMT results identified in **Table 3** reflect the VMT for implementation of the entire project under the worst case scenario, however, 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 further.

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 require 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.

VTM Reducing Policies and Improvements

There are several policies and program that can afford opportunities for VMT reductions and mitigation, including:

- Transportation Demand Measures
- 2046 Regional Transportation Plan & the Sustainable Communities Strategy
- Participation in a VMT Bank
- VMT Reducing Design Principles

Transportation Demand Measures (TDMs)

VTM 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 2022². 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 measures³ 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%.

² 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.

³ 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.

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.
- *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).

In consideration that each of these measures, it should be noted that these are for informational purposes only, and the reduction in Vehicle Miles Traveled (VMT) resulting from implementing these measures can vary significantly based on local conditions, the extent of implementation, and how these strategies are integrated with other transportation and land use policies. Given the nature of complexity and variety of factors, while there are case studies on the high end of the ranges, VMT reduction would likely be closer to the low end.

2046 Metropolitan 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

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.

Multimodal Analysis

The following City/County plans, policies, performance metrics, and goals are considered important to considering whether the proposed action would result in a conflict as described in (a) of the 2025 CEQA Statute Guidelines Appendix G Section XVII:

1. City of Tracy General Plan (2011):
 - Goal CC-2: A high level of connectivity within the City of Tracy
2. Draft Tracy Transportation Master Plan (2022) goals:
 - Goal CIR-1: A roadway system that provides access and mobility for all of Tracy's residents and businesses while maintaining the quality of life in the community
 - Goal CIR-2: Adequate interregional access
 - Goal CIR-3: Safe and convenient bicycle and pedestrian travel as alternative modes of transportation in and around the city
 - Goal CIR-4: A balanced transportation system that encourages the use of public transit and high occupancy vehicles
3. City of Tracy Short Range Transit Plan (2019):
 - Goal CIR-4: A balanced transportation system that encourages the use of public transit and high occupancy vehicles
4. San Joaquin Council of Governments Regional Transportation Plan (2022)
 - Performance metrics:
 - 8-percent more development within a half-mile of a transit station
 - 18.7-percent more new development in infill areas
 - 1,811 fewer acres of impervious surface
 - Policy:
 - Maximize mobility and accessibility
 - Preserve the efficiency of the existing transportation system

As described, the City of Tracy has plans and policies that encourage transit usage and development within a half-mile of transit stations throughout the City. In addition, these plans and policies encourage the development of a balanced transportation system that includes safe and convenient bicycle and pedestrian travel.

Figure 1 provides an overview map of the existing TRACER routes. TRACER Transit is the public transportation system serving the City of Tracy, California. It provides fixed-route bus services within the city, aiming to offer an efficient and affordable transportation option for residents and visitors. **Figure 2** shows the existing and proposed/potential stations in the region and the City of Tracy for Altamont Corridor Express (ACE), while **Figure 3** shows the SJ RTD Hopper Routes (90, 97) that pass-through the City. The SJ RTD Hopper is a public transit service provided by the San Joaquin Regional Transit District (SJ RTD) in California. The Hopper service offers flexible, on-demand transportation within designated service areas. **Figure 4** illustrates the existing and proposed bike ways/trails. The following analysis was undertaken to determine how the new land use patterns would affect multimodal services and facilities.

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.

Multimodal Assessment

Figure 5 provides a map of the transit overlay analysis. It was 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.

Figure 6 provides a map of the bicycle overlay analysis. The City has identified bicycle facilities as indicated in **Figure 4** that would provide bicycle connectivity. 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.

Findings

Most new residents will have the option to take transit to work or non-work destinations as shown in **Figure 5**. Additionally, the proposed project is not expected to result in any adverse effects on any existing transit facilities. Furthermore, all housing units as part of the Rezone Program would be located within a half-mile of bicycle facilities and have access to pedestrian facilities as shown in **Figure 6**. The proposed Project is not expected to result in any adverse effects on any existing bike or pedestrian facilities.

The assessment of buffer zones around transit stations, bike and pedestrian facilities aligns 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, it supports a balanced transportation system that encourages public transit use (Goal CIR-4 from both the Transportation Master Plan and Short-Range Transit Plan) and meets the SJCOG RTP performance metrics for development near transit stations and infill areas, preserving the efficiency of the existing transportation system.

As such, it was determined that the proposed Project would result in a less-than-significant multimodal impact and is in accordance with existing plans and policies.

Hazards

To supplement the hazards evaluation, crash data was obtained from the Transportation Injury Mapping System (TIMS), an online platform of geo-coded California crash data from the Statewide Integrated

Traffic Record System (SWITRS). A crash rate per 1,000,000 VMT was developed using the TIMS crash data and Replica, an online big data platform, for VMT data for the City of Tracy. This data is summarized in **Table 5**. below.

Table 5 – Tracy SOI Crash Data

City of Tracy	Value	Source
Annual Crashes (2024)	241	TIMS
Daily VMT* (2024)	1,531,117	Replica
Crash per 1,000,000 VMT	0.43	-

**Daily VMT is annualized by multiplying by 365 days.*

To determine the magnitude of new crashes that would likely occur in response to the proposed changes, a regional analysis was conducted to determine the impact of the Buildout Conditions on regional crash rates. Recent crash data (2024) for the Tracy was obtained from the Transportation Injury Mapping System (TIMS) and 2024 VMT data was obtained from Replica to determine the Tracy crash rate by dividing the City VMT by the number of crashes. As shown **Table 5** in above, it was determined that 0.43 crashes occurred per 1,000,000 vehicle miles traveled within the City of Tracy. To determine whether the Buildout Conditions would likely result in an increase in crashes as compared to the No Build conditions, the estimated crash per VMT was applied to the VMT/capita and VMT/Employee obtained from VMT analysis to estimate the crash rate with and without Buildout conditions. This analysis is summarized in **Table 6** below.

Table 6 – Crash Results by Scenario

Scenario	VMT/Capita	VMT/Employee	Crash per Capita*	
			Residential	Employee
2046 No Build	17.5	13.0	7.6	4.6
2046 Buildout	15.3	13.4	6.6	5.8
Reduction (Buildout – No Build)	-	-	1.0%	+1.2%
*This represents the crash per capita per 1,000,000 VMT				

Note that this information is provided for informational purposes only, and results can vary significantly based on local conditions, and how the project is integrated with other transportation and land use policies.

To determine whether the project will substantially increase hazards, analysis was limited to whether “a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)” would be introduced because of the project. While the project will 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, the project would be expected to result in a less than significant hazard impact.

Emergency Access

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 will also consider the need for increasing the availability of emergency services under its existing impact fee program updates. Based on this and the general distribution of proposed rezoning sites across the City of Tracy, it is determined that there will be a less-than-significant impact on emergency access.

Figure 1 – TRACER Routes

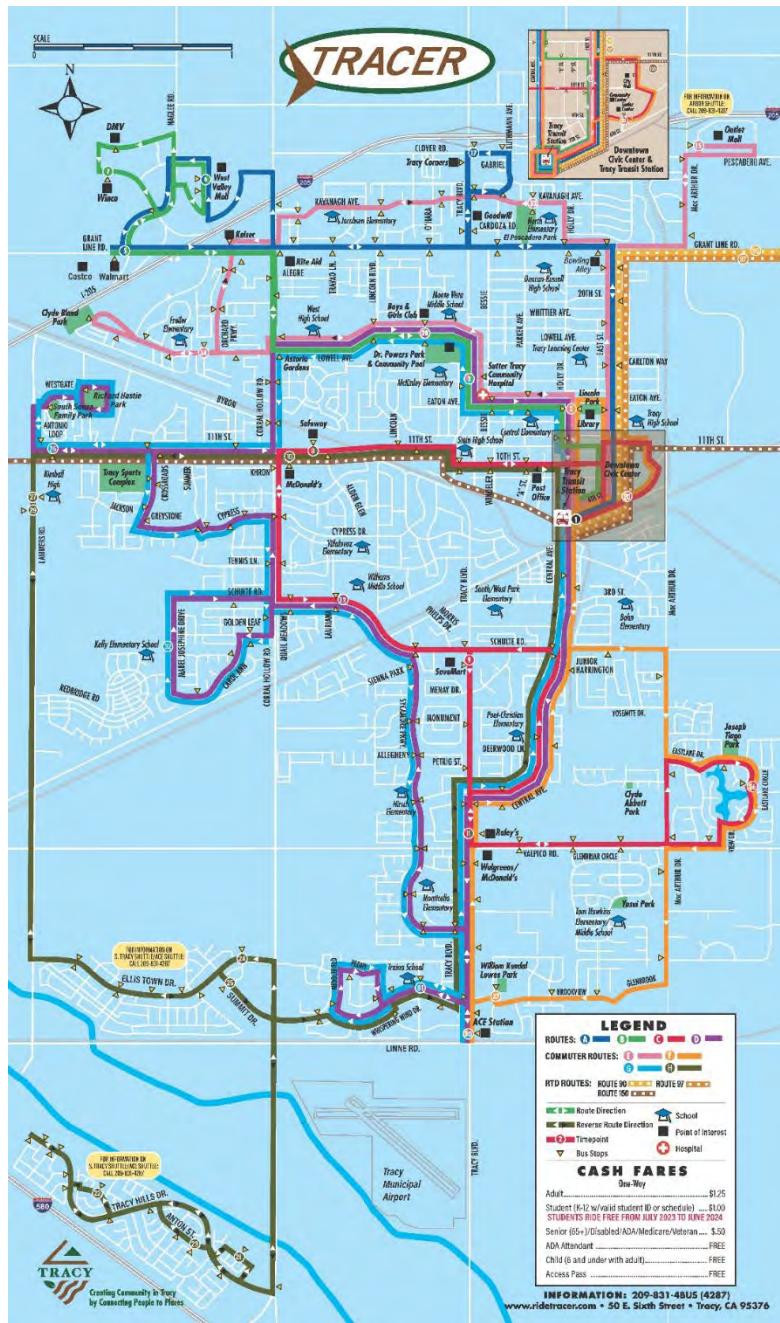


Figure 2 – ACE station locations



Figure 3 – SJ RTD Tracy stations

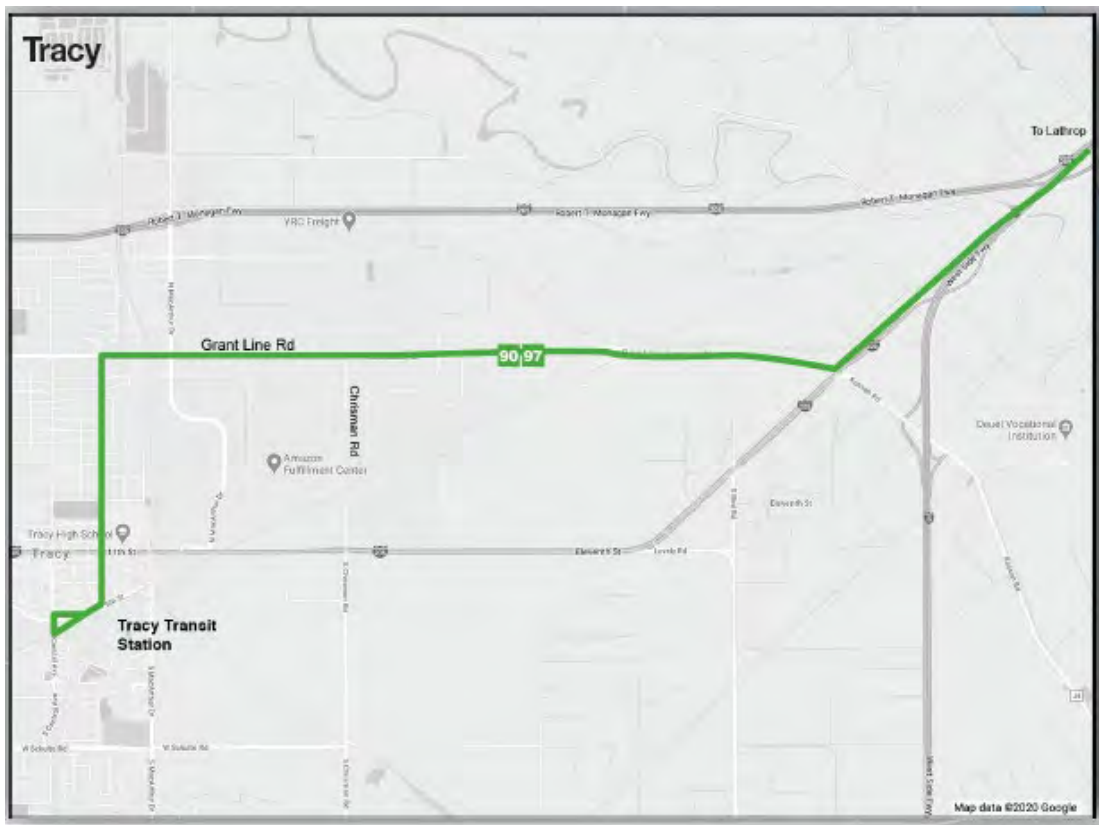


Figure 4 – Bike Network

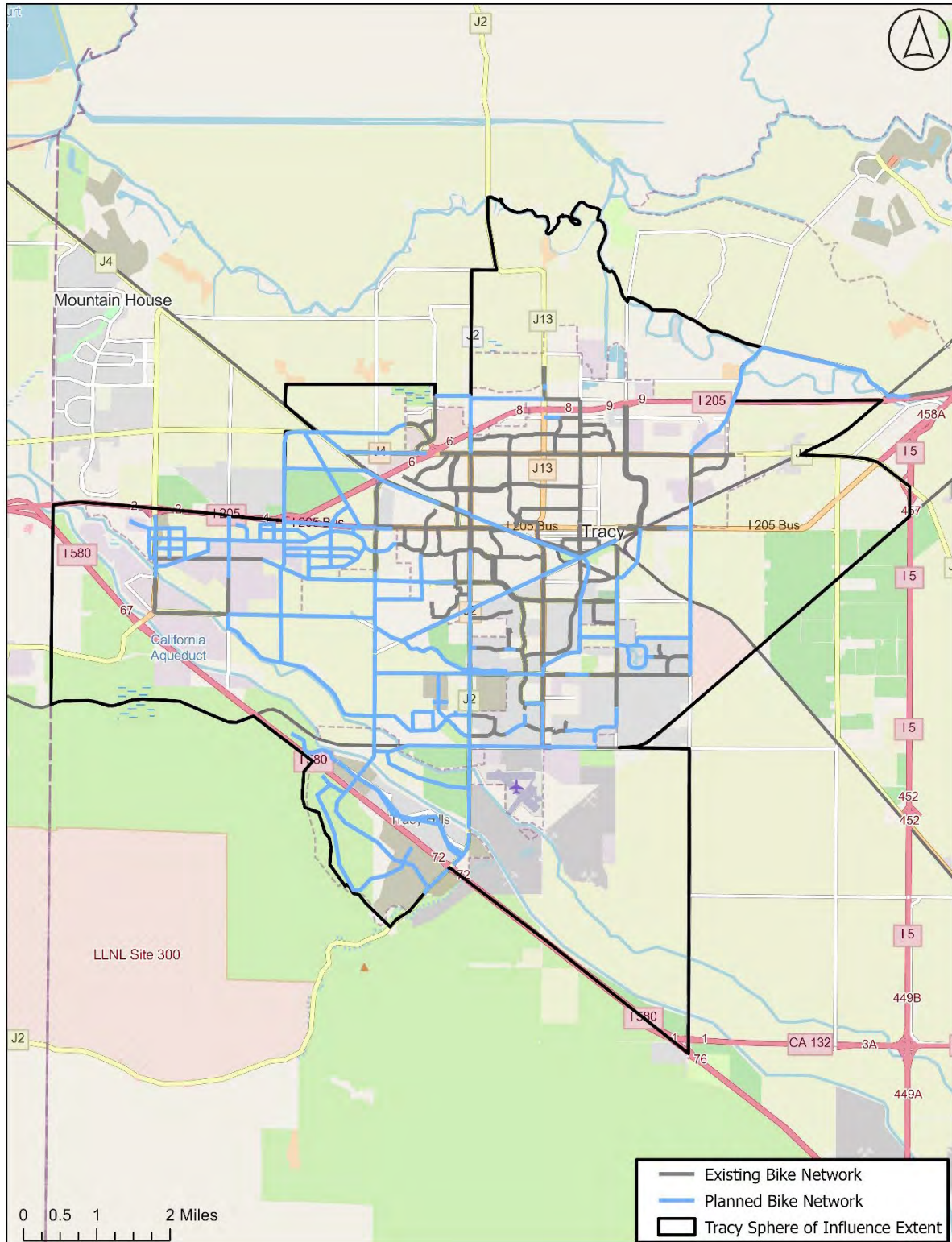


Figure 5 – Buffer zones around transit stops

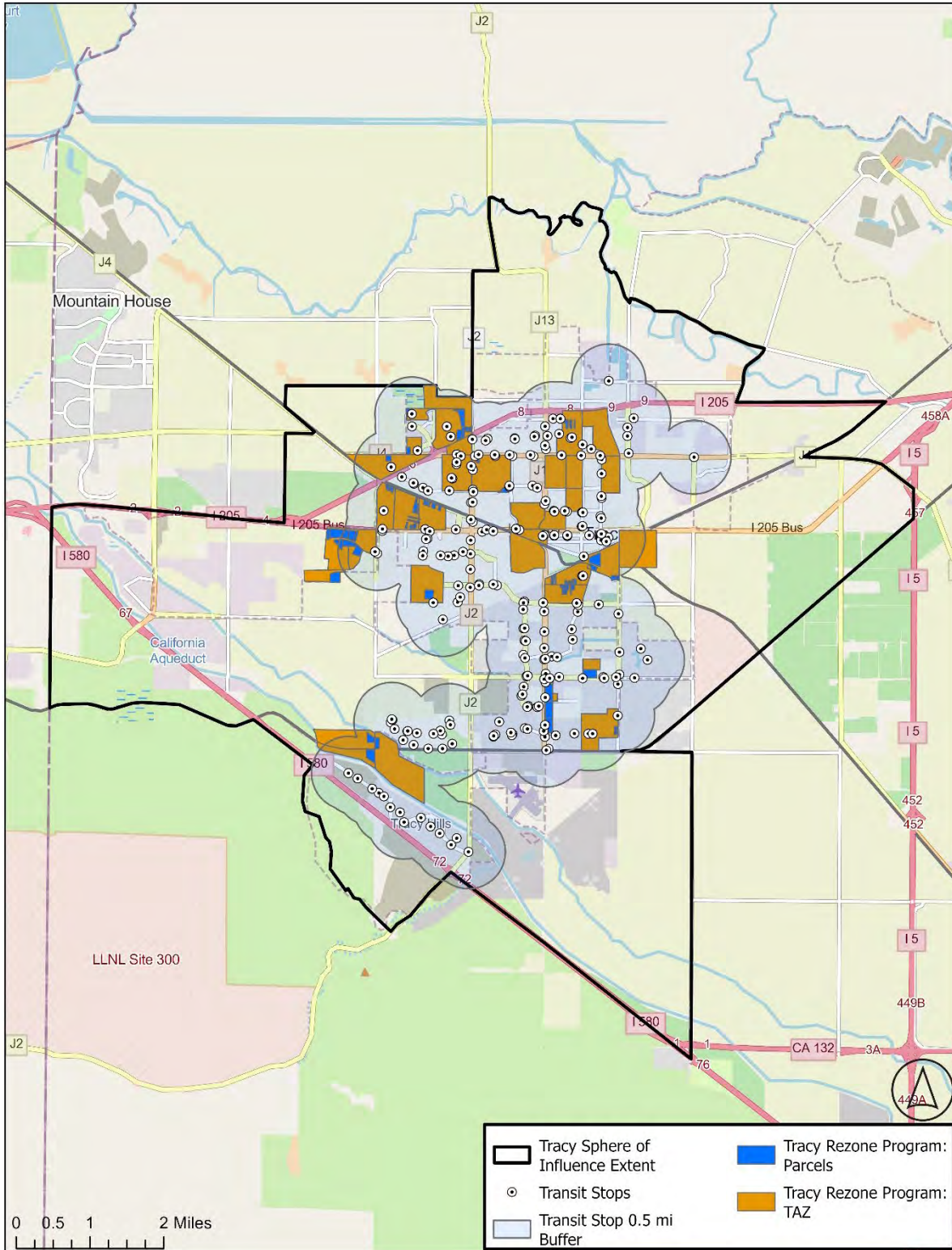
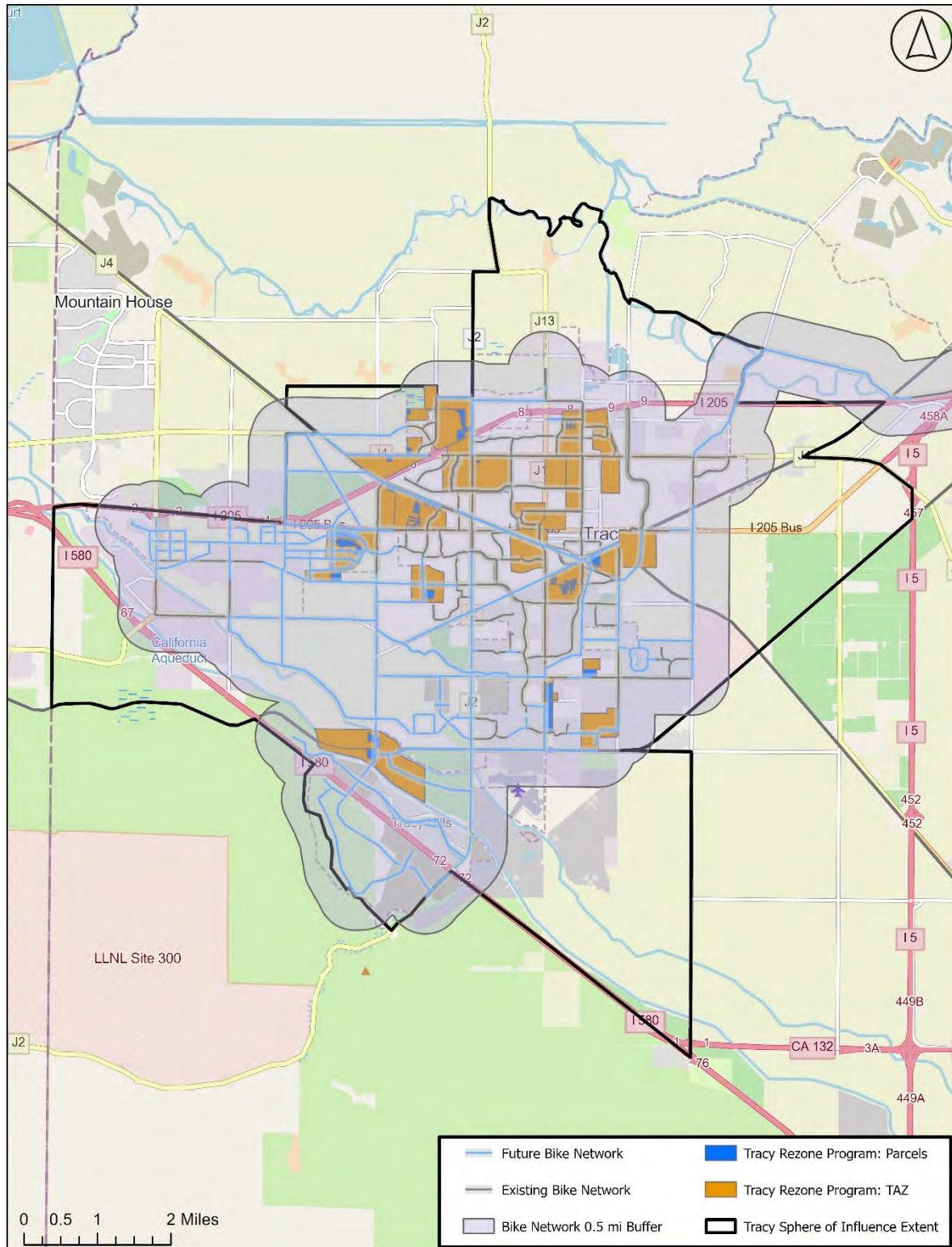


Figure 6 – Buffer zones around bikeways/trails



Findings

Based on the results of this analysis, the following findings are made:

- Based on analysis, the Project is determined to result in a less than significant impact for VMT. Between No Build and Build scenarios, it is determined that VMT per capita will decrease with the implementation of the Project by 2.2 VMT for residential land uses, to 15.3 VMT per capita, and will increase VMT per employee by 0.4 VMT for employment based land uses, to 13.4 VMT per employee.
- Most new residents will have the option to take the transit to work or non-work destinations and the proposed Project is not expected to result in any adverse effects on any existing transit facilities. Furthermore, all housing units as part of the Rezone Program Update would be located within a half-mile of bicycle facilities and have access to pedestrian facilities. As the housing sites are located near existing and planned bike and pedestrian facilities they align with the City of Tracy's goals and policies, ensuring high connectivity, providing access and mobility while maintaining quality of life, and promoting safe bicycle and pedestrian travel. As such, it was determined that the proposed project would result in a less than significant multimodal impact and is in accordance with existing plans and policies.
- Given that 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, the project would be expected to result in a less than significant hazard impact.
- The planning and design of new housing developments 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 will also consider the need for increasing the availability of emergency services under its existing impact fee program updates. Based on this and the general distribution of sites across the City of Tracy, it is determined that there will be a less than significant impact on emergency access.

APPENDIX E

Tribal Cultural Resources Data



June 17, 2024

Subject: City of Tracy Draft Environmental Impact Report for the City of Tracy Rezone Program and General Plan Amendment

To Whom it May Concern,

The City of Tracy is in the process of amending their General Plan and as part of this process we are contacting individuals and organizations listed with the Native American Heritage Commission on their behalf who may wish to engage in consultation with the City and to contact tribes that have requested consultation through the AB 52 process.

The proposed project analyzes the environmental impacts related to a rezoning program to accommodate regional housing needs, and a targeted update to the City's General Plan, including the Land Use Element, Circulation Element, Safety Element, and the addition of an Environmental Justice Element.

No specific development projects are proposed as part of the project.

Government Code Sections 65352 and 65352.3 (SB 18)

The California Government Code establishes responsibilities for local governments to contact, provide notice to, refer plans to, and consult with tribes. The following list briefly identifies the contact and notification responsibilities of local governments, in sequential order of their occurrence.

Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code §65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.

Local governments must send notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code §65092).

Public Resources Code Sections 21080.3.1 and 21080.3.2 (AB 52)

The City of Tracy is providing this formal notification of the project and General Plan Update and the tribe's consultation opportunity, pursuant to Public Resources Code (PRC) § 21080.3.1. The City is in the process of gathering background data and anticipates that the Project will require an Environmental Impact Report.

Please find the Attached Project NOP that includes a description of the proposed Project, a map showing the Project location, and the name of our point of contact, pursuant to PRC § 21080.3.1 (d).

Summary

You are invited to provide information regarding sites, traditional cultural properties, values, or other resources considerations within the General Plan's Planning Area, and are invited to recommend mitigation measures so that this information may be incorporated into the planning and environmental phase of the Project. Please note that this is not a request or solicitation for paid consultation services.

The Project Description and Planning Area are delineated in the NOP attached with this letter.

If you wish to consult with the City of Tracy during the General Plan CEQA review process, please contact:

Craig Hoffman, Senior Planner
City of Tracy · 333 Civic Center Plaza · Tracy, CA 95376
Email: craig.hoffman@cityoftracy.org
Phone: (209) 831-6426

Thank you for your time reviewing this letter, and NOP.

Enclosure: Notice of Preparation (NOP) that includes a Project Description and Project area maps.

**NOTICE OF PREPARATION
CITY OF TRACY REZONE PROGRAM
AND GENERAL PLAN AMENDMENT
DRAFT ENVIRONMENTAL IMPACT REPORT**



Date: June 14, 2024

To: State Clearinghouse, Agencies, Organizations and Interested Parties

From: City of Tracy Planning Department

Subject: Notice of Preparation and Scoping Meeting for the Draft Environmental Impact Report for City of Tracy Rezone Program and General Plan Amendment

Scoping Meeting: July 10, 2024 at 7pm. Planning Commission Hearing, Tracy City Council Chambers

Comment Period: June 14, 2024 to July 15, 2024

NOTICE IS HEREBY GIVEN that the City of Tracy (City), as the Lead Agency, has determined that the adoption of zoning amendments and other actions needed to implement the Tracy General Plan (collectively, the proposed Project) will require preparation of an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation (NOP) is being distributed to applicable responsible agencies, trustee agencies, and interested agencies, parties, and organizations as required by CEQA. Interested agencies and parties are requested to comment on the scope and content of the significant environmental issues, mitigation measures, and reasonable alternatives to be explored in the Draft EIR. Information regarding the project description, location, public outreach process, and topics to be addressed in the Draft EIR is provided below.

Notice of Preparation 30-Day Comment Period

The City, as lead agency, is soliciting comments from responsible agencies, trustee agencies, public agencies, organizations, and members of the public regarding the scope and content of the Draft EIR, and the environmental issues and alternatives to be addressed in the Draft EIR. The City requests that responsible agencies, trustee agencies, interested parties, and the Office of Planning and Research respond in a manner consistent with Section 15082(b) of the CEQA Guidelines. Pursuant to Public Resources Code Section 21080.4, responsible agencies, trustee agencies, and the Office of Planning and Research must submit any comments in response to this notice no later than 30 days after receipt. In accordance with the time limits established by CEQA, the NOP public review period will begin on June 14, 2024 and end on July 15, 2024.

In the event that the City does not receive a response from any responsible or trustee agency by the end of the review period, the City may presume that the responsible agency or trustee agency has no response to make (CEQA Guidelines Section 15082(b)(2)). Please provide your written/typed comments (including name, affiliation, and contact information) to the address shown below by 5:00 p.m. on Monday, July 15, 2024. For additional information, please contact:

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

Scoping Meeting

The City will hold a scoping meeting to: (1) inform the public and interested agencies about the proposed Project, and (2) solicit public comment on the scope of the environmental issues to be addressed in the Draft EIR, as well as the range of alternatives to be evaluated. The date, time, and place of the Scoping Meeting is as follows:

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CITY OF TRACY REZONE PROGRAM
AND GENERAL PLAN AMENDMENT
DRAFT ENVIRONMENTAL IMPACT REPORT



City of Tracy Rezone Program and General Plan Amendment Draft EIR Scoping Meeting

Wednesday, July 10, 2024, 7:00 p.m.

Tracy City Council Chambers

333 Civic Center Plaza

Tracy, CA

Project Location

Tracy is located in San Joaquin County near the intersection of several Interstate highways including: I-205, I-580 and I-5, as shown on **Figure 1**. The General Plan assesses two delineated areas known as the Sphere of Influence (SOI) and the Planning Area. A description of each is 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.

Rezone Program: **Figure 2** shows the Project's rezone areas.

Project Description

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 (SJCOC) region was adopted in 2024 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 SJCOC 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. 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.

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However, development that could occur in association with rezoning of opportunity sites under the HE Programs will result in modifications to the Zoning Ordinance and development standards to accommodate housing uses on the opportunity sites.

In order to accommodate the City's RHNA units plus a buffer for each of the income categories, the Project would rezone opportunity sites to ensure the ability to develop housing at specified densities. This included rezoning of sites to accommodate the City's RHNA units as shown on Figure 2 and in Attachment A-1 and A-2.

The 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

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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.

Additionally, 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 introduce 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 include 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

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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 planning.

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 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 240 acres and would accommodate 6,588 units. Additional details are included in the City's Housing Element, is available at www.cityoftracy.org/our-city/departments/planning. Rezone sites identified in the Housing Element are summarized in Attachment A-1 of this document. To provide logical rezone boundaries lands adjacent to the Housing Elements rezone sites are also included in the overall rezone program. These remainder rezone areas are included in Attachment A-2. The Inventory of rezones are shown in Figure 2.

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:

- o MDR – from 5.9-12 du/ac to 5.9-20 du/ac
- o MDC – from 5.9-12 du/ac to 5.9-20 du/ac
- o HDR – from 12-25 du/ac to 20-35 du/ac
- o GHC – from 12-25 du/ac to 20-35 du/ac
- o 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.

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As shown in Table 1 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 1. 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	

Sources: De Novo Planning Group, 2024, 2023 San Joaquin County Assessor Data File, Tracy Housing Element Inventory Shapefiles, Tracy Travel Demand Model (Kimley-Horn).

**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.*

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.

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.

Draft Subsequent EIR Analysis

In 2005 the City adopted a new General Plan and certified the associated General Plan EIR (State Clearinghouse (SCH) # 1992122069). The City prepared an Amended Draft EIR, 2006 (SCH# 1992122069). In 2009 the City prepared a Draft Supplemental EIR, (SCH# 2008092006), and Recirculated the Draft Supplemental EIR in 2010 (SCH# 2008092006). A Final Supplemental EIR (SCH# 2008092006) was prepaid in 2010, and an Addendum to the General Plan Final EIR, was prepared in 2011 (SCH# 2008092006).

The City will prepare a Subsequent General Plan EIR for the proposed rezone program and General Plan Amendments. The EIR will be prepared in accordance with CEQA, the CEQA Guidelines, relevant case law, and City procedures.

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Initial Study

An Initial Study has been prepared for the proposed Project. The Initial Study identifies environmental areas/issues that would result in No Impact or a Less-than-Significant Impact, and environmental areas/issues that would result in a Potentially Significant Impact. All Potentially Significant Impact areas/issues will be addressed in greater detail in the Draft Subsequent EIR. Areas/issues that would result in No Impact or a Less-than-Significant Impact, as identified in the Initial Study, or would be consistent with the analysis and findings included within the City's General Plan EIR will not be addressed further in this Subsequent EIR.

The Subsequent EIR will incorporate by reference applicable portions of the certified City of Tracy General Plan Draft EIR (inclusive of all supplements and amendments).

The EIR will analyze potentially significant impacts associated with Project buildout including adoption and implementation of the rezone program and General Plan Amendments. 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. In particular, the EIR will focus on the Project's increased development potential as a result of rezones, and impacts associated with aggregate city-wide buildout through 2045 as shown in Table 1. The EIR will evaluate a range of environmental issues contemplated under CEQA and the CEQA Guidelines as set forth in CEQA Guidelines Appendix G, except for specific topics identified below as having no impact, and where impacts are consistent with previous analysis and determinations. Where potentially significant or significant impacts are identified, the EIR will discuss mitigation measures to address the impact.

The proposed Project includes a rezone program, 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. (i.e., increased vehicle trips, GHG emissions, noise, water use, etc.).

At this time, the City anticipates that EIR will be organized in the following topical areas:

- **Air Quality** - The Draft EIR will describe the potential short- and long-term impacts of Project implementation on local and regional air quality and air quality plans based on methodologies issued by the San Joaquin Valley Air Pollution Control District (SJVAPCD).
- **Greenhouse Gases** - The Draft EIR will include a greenhouse gas emissions analysis using the San Joaquin Valley Air Pollution Control District's methodology and thresholds for evaluating a project's greenhouse gas emissions and will address the potential for the Project to conflict with an adopted plan or other regulations adopted for the purpose of reducing greenhouse gases.
- **Noise** - The Draft EIR will describe noise impacts and related mitigation needs associated with short-term construction and long-term operation (i.e., traffic, mechanical systems, etc.) associated with the Project.
- **Transportation** - The Draft EIR will describe the transportation and circulation implications of Project implementation, including impacts on the circulation system including transit, roadways, pedestrian

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and bicycle facilities, potential effects related to vehicle miles traveled, design or incompatible use hazards, and adequate emergency access.

- **Utilities/Service Systems** - The Draft EIR will describe Project implementation effects related to new or expanded water supply, sewer and wastewater treatment, storm drainage, solid waste and recycling.
- **Tribal Cultural Resources** - The Draft EIR will describe Project implementation impacts and mitigation associated with tribal cultural resources.

In addition to the potential environmental impacts noted above, the Draft EIR will evaluate potential cumulative impacts and the mandatory findings of significance associated with Project implementation. The Draft EIR will also compare the impacts of the Project to a range of reasonable alternatives, including a No Project alternative, and will identify an environmentally superior alternative.

Environmental Topics Scoped from Further Analysis

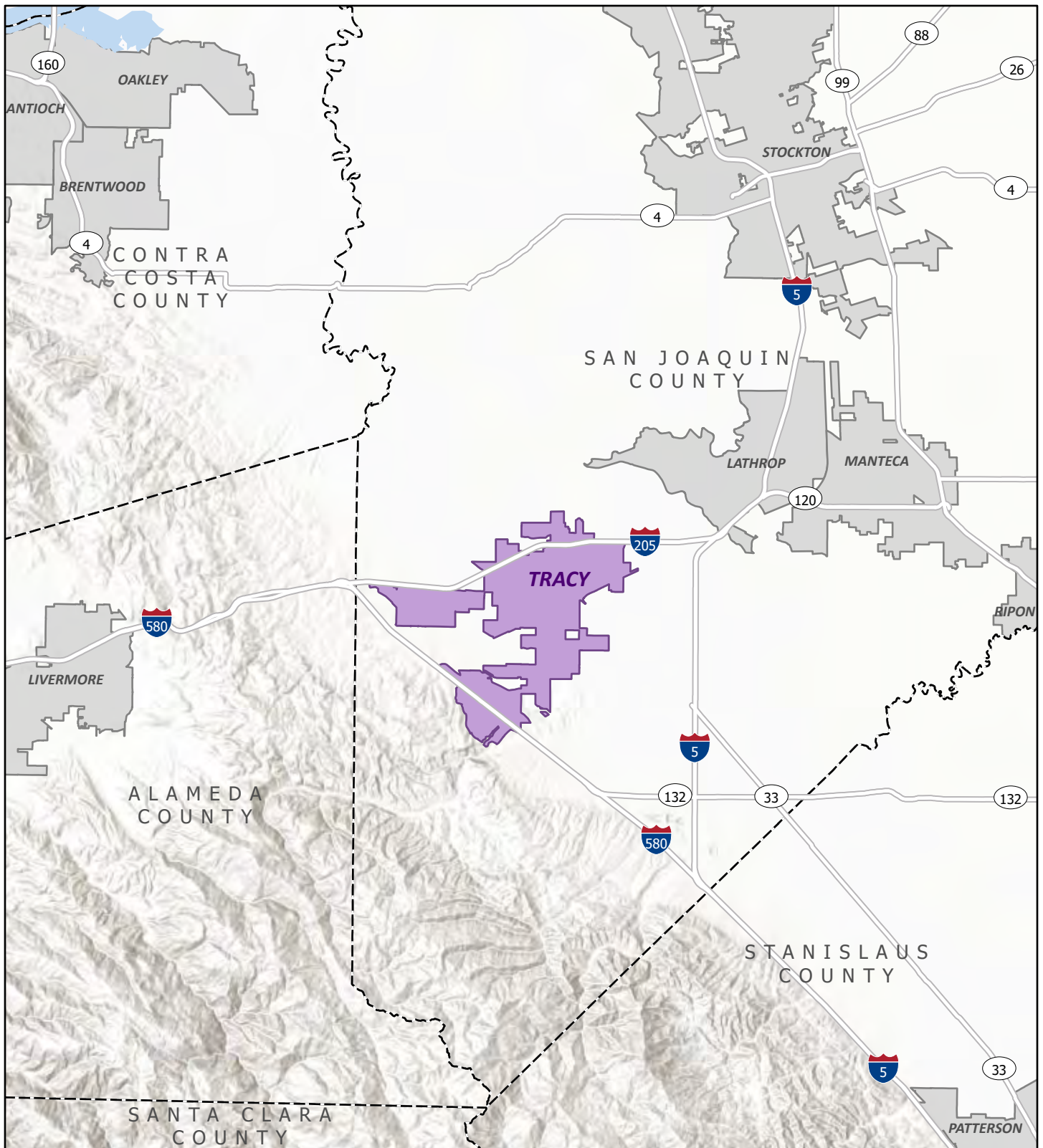
The attached Initial Study and Environmental Checklist includes a detailed discussion and analysis of environmental impacts associated with the proposed Project's rezone's and associated General Plan updates described previously. The environmental topics scoped from further analysis included:

- 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

Previous Environmental Analyses

Previous environmental analysis prepared and certified for 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

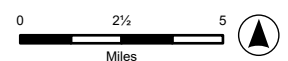


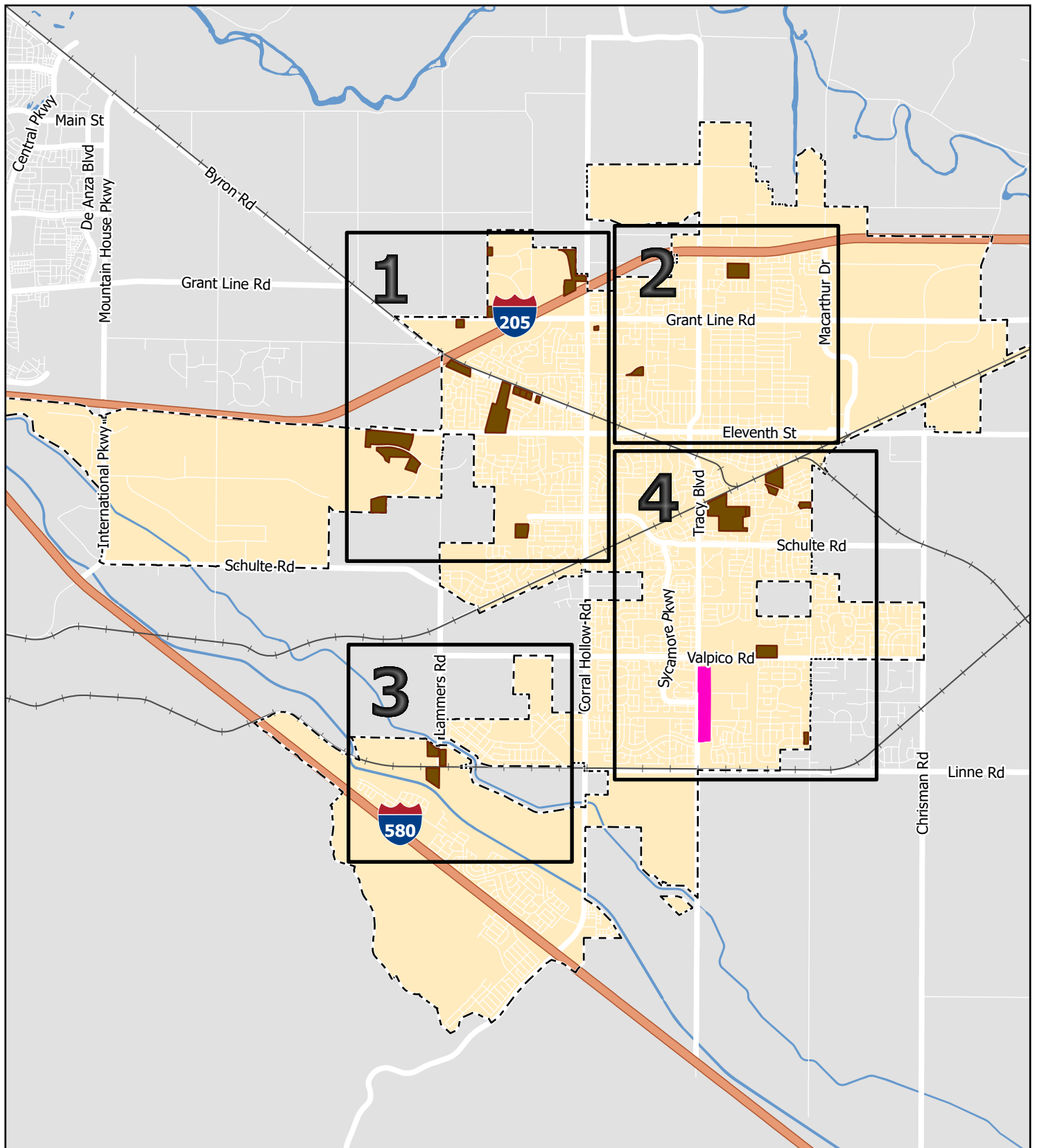
CITY OF TRACY - HOUSING ELEMENT REZONES

Legend

-  City of Tracy
-  Other Incorporated Area
-  County Boundary

Figure-1: Regional Location





City of Tracy

Rezoned Area

To be rezoned HDR - High Density Residential

To be rezoned MU1 - Mixed Use 1

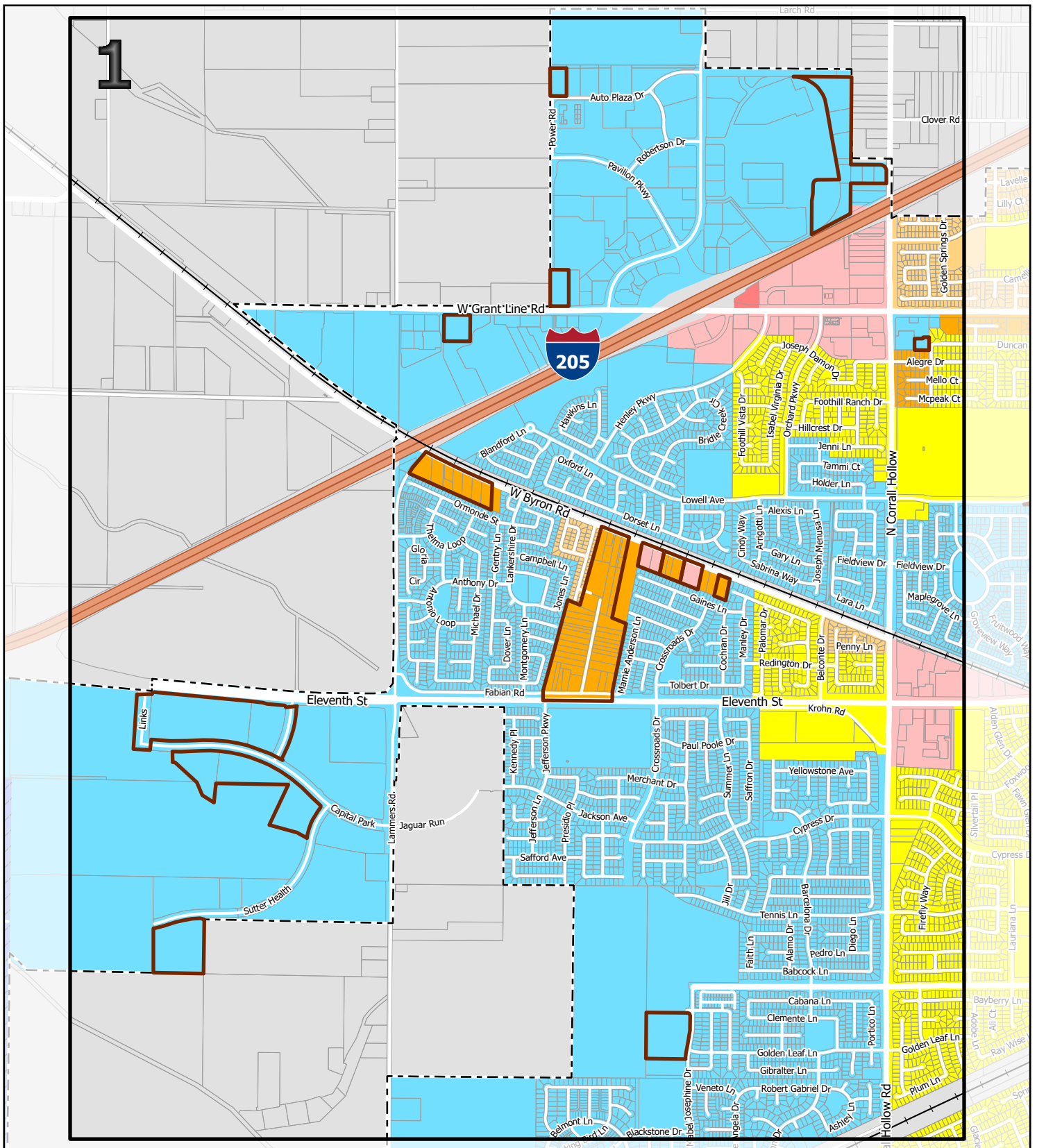
Grid Map Extents*

CITY OF TRACY - REZONE PROGRAM

Rezoned Areas Index Map



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



CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 1 Northwest Tracy

Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

LDR - Low Density Residential

MDR - Medium Density Residential

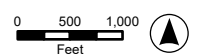
MDC - Medium Density Cluster

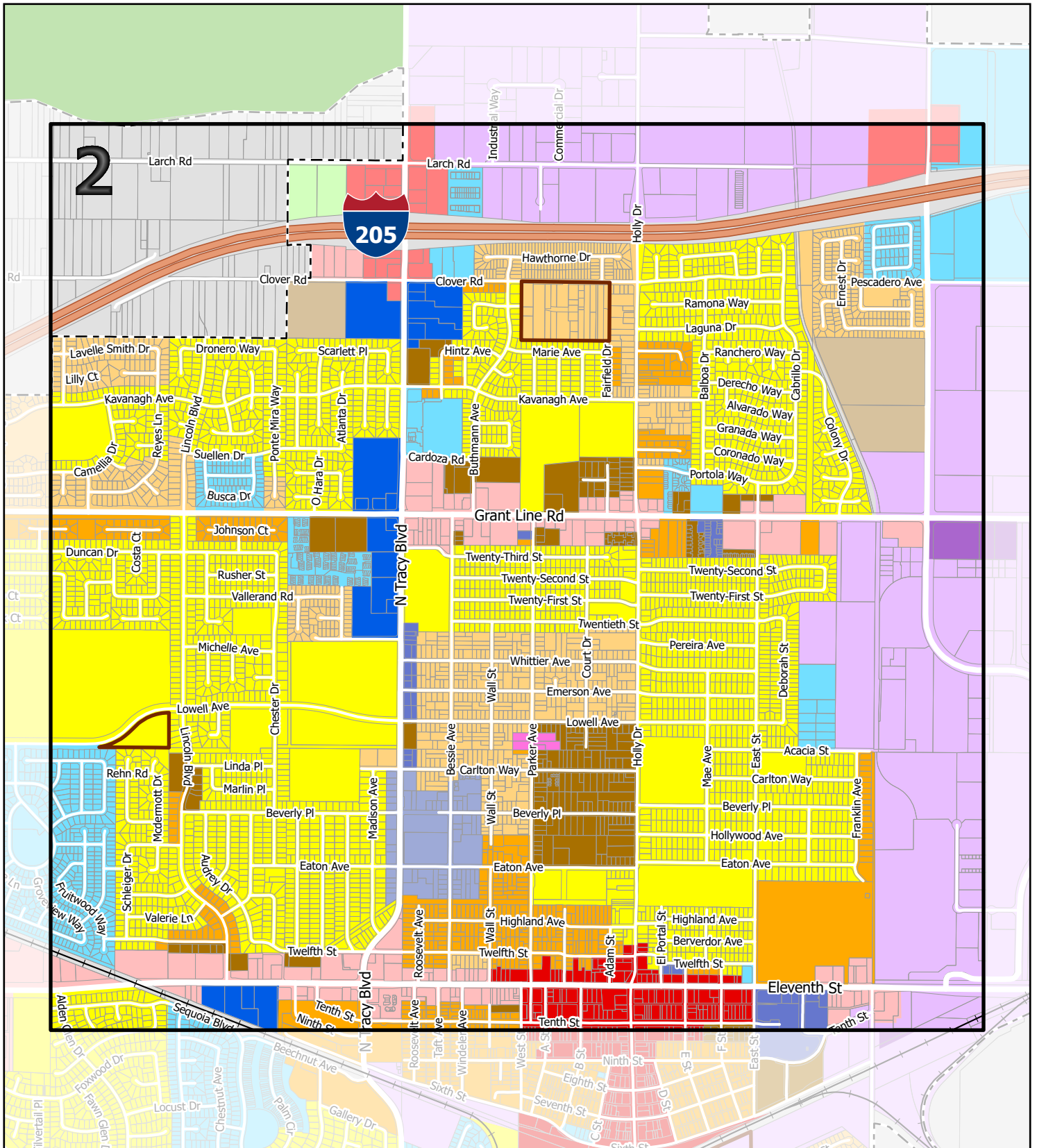
PUD - Planned Unit Development

HS - Highway Service

GHC - General Highway Commercial

CRSP - Cordes Ranch Specific Plan





Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

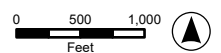
LDR - Low Density Residential
MDR - Medium Density Residential
MDC - Medium Density Cluster

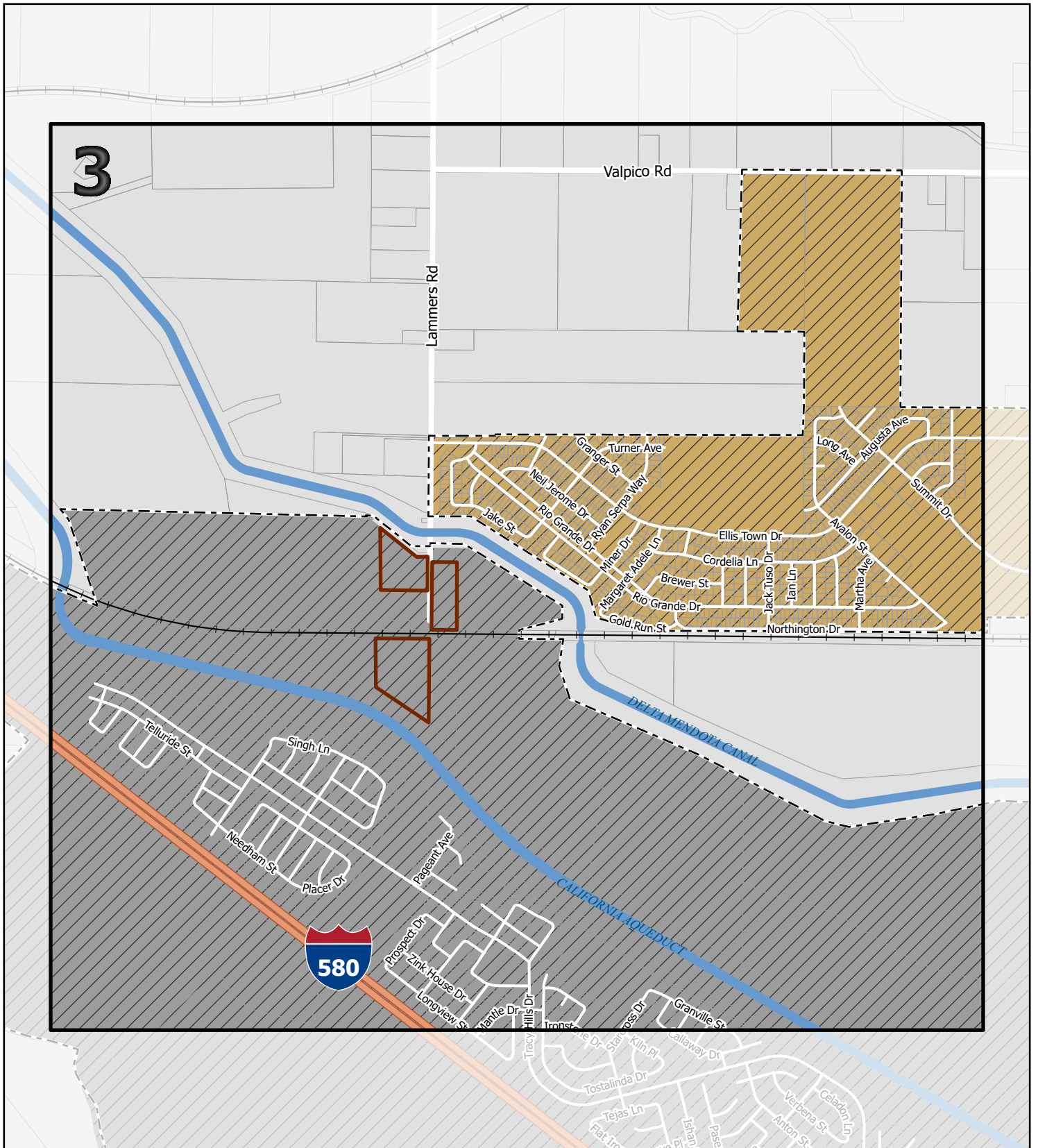
HDR - High Density Residential
RMH - Residential Mobile Home
PUD - Planned Unit Development
M1 - Light Industrial
M2 - Heavy Industrial
NS - Neighborhood Shopping
CS - Community Shopping Center
CBD - Central Business District

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

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 2 North/Central Tracy





Tracy City Limits

Rezone Area

To be rezoned HDR - High Density Residential

Current Zoning Designation

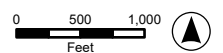
E - Ellis Park Specific Plan

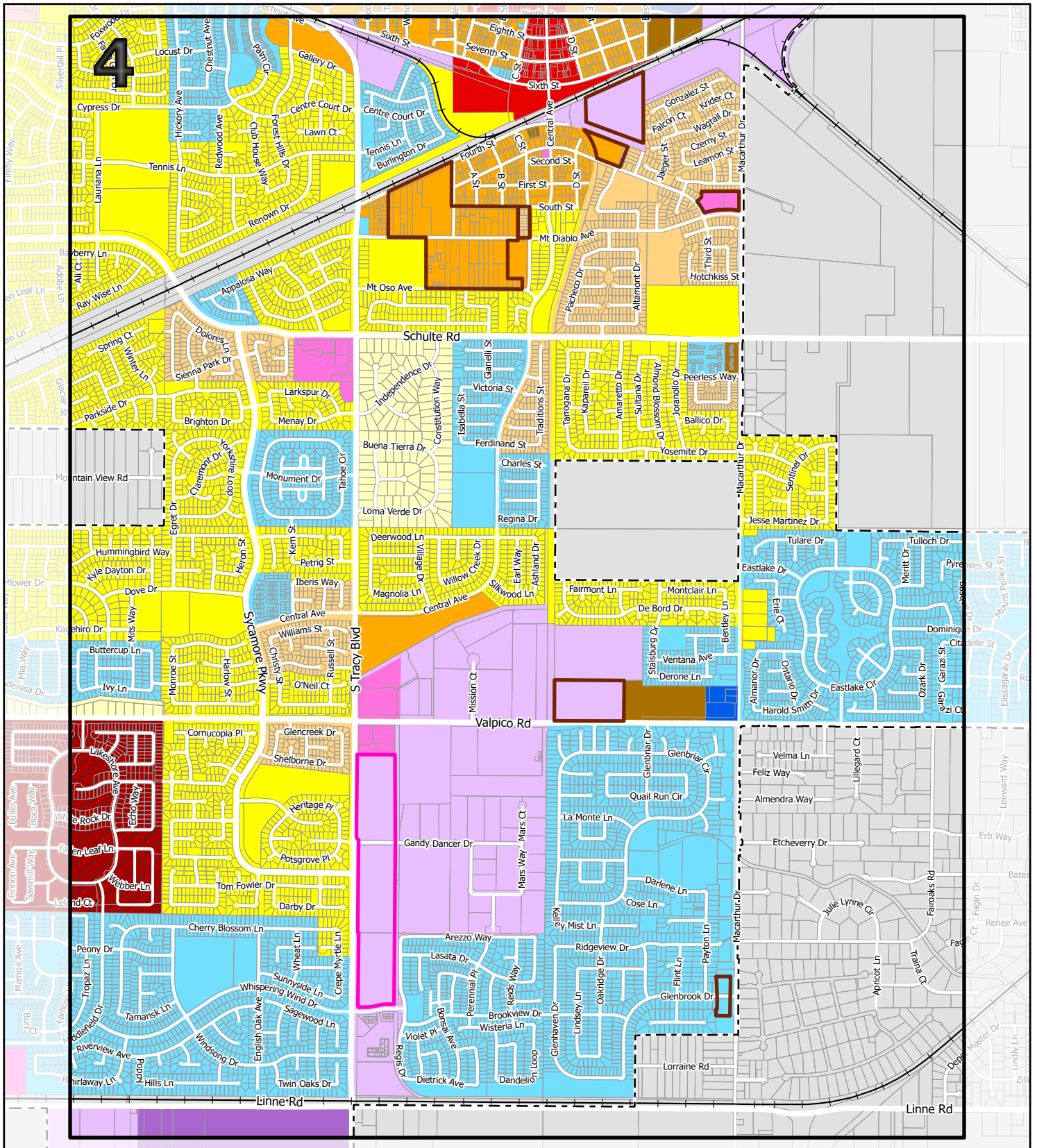
THSP - Tracy Hills Specific Plan

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 3

Southwest Tracy/Canals





Tracy City Limits

Rezone Area

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

Current Zoning Designation

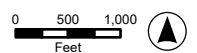
- RE - Residential Estate
- LDR - Low Density Residential

- 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

CITY OF TRACY - REZONE PROGRAM

Rezone Areas: Grid 4 Central/South Tracy



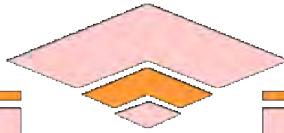
Attachment A-1 Housing Rezone Sites Inventory Table

APN	Address	Size (Acres)	General Plan Designation (Current)	Current Zoning	Proposed Zoning	Existing Units	Total Units	Existing Use
20925050	SW of intersection of Capitol Park Dr and S Lammers Rd	10	Office	PUD	HDR	0	298	Vacant
20947002	W of intersection of W 11th St and S Lammers Rd	3.7		PUD	HDR	0	111	Vacant
20947003	W of intersection of W 11th St and S Lammers Rd	19.3	Office	PUD	HDR	0	575	Vacant
20947004	W of intersection of W 11th St and S Lammers Rd	6.7	Office	PUD	HDR	0	198	Vacant
20947005	NW of intersection of S Lammers Rd and Capitol Park Rd	2.4		PUD	HDR	0	73	Vacant
20947009	W of intersection of S Lammers Rd and Capitol Park Rd	6.1	Office	PUD	HDR	0	181	Vacant
20947010	W of intersection of S Lammers Rd and Capitol Park Rd	7.4	Office	PUD	HDR	0	220	Vacant
20947011	Intersection of S Lammers Rd and Capitol Park Rd	7	Office	PUD	HDR	0	209	Vacant
21205035	3200 Naglee Rd	4.7	Commercial	I-205	HDR	0	139	Vacant
21205036	N of intersection of W Valley Mall and Naglee Rd	2.2	Commercial	I-205	HDR	0	65	Vacant
21205037	Intersection of W Valley Mall and Naglee Rd	1.9	Commercial	I-205	HDR	0	58	Vacant
21205038	3100 N Corral Hollow Rd	1	Commercial	I-205	HDR	0	29	Vacant
21205039	W of intersection of W Valley Mall and Coral Hollow Rd	0.9	Commercial	I-205	HDR	0	28	Vacant
21205040	Southside of W Valley Mall	0.9	Commercial	I-205	HDR	0	28	Vacant
21205041	Intersection of Naglee Rd and W Valley Mall	1	Commercial	I-205	HDR	0	29	Vacant
21205042	S of intersection of Naglee Rd and W Valley Mall	2.1	Commercial	I-205	HDR	0	62	Vacant
21205052	3150 Naglee Rd	4.9	Commercial	I-205	HDR	0	146	Commercial/Retail
21227020	Intersection of Power Rd and Auto Plaza Rd	2	Commercial	PUD	HDR	0	60	Vacant
21229021	2855 W Grant Line Rd	3	Commercial	PUD	HDR	0	88	Vacant
21443001	348 W Clover Rd	0.8	Residential Medium	MDC	HDR	0	24	Residential
21443004	292 W Clover Rd	1.9	Residential Medium	MDC	HDR	0	57	Residential
21443023	188 W Clover Rd	1	Residential Medium	MDC	HDR	1	27	Residential
21443046	W of intersection of W Clover Rd and Briar Ln	0.8	Residential Medium	MDC	HDR	0	23	Vacant
21443047	N of intersection of Dovenshire Dr and Marie Ave	1.1	Residential Medium	MDC	HDR	0	31	Vacant
23202055	Intersection of Duncan Dr and Enyeart Rd	0.8	Commercial	PUD	HDR	0	23	Vacant
23213010	Intersection of W Lowell Ave and Lincoln Blvd	3.8	Public Facilities	LDR	HDR	0	113	School District Property
23510013	310 W Mt Diablo Av	0.6	Residential Medium	MDR	HDR	0	16	Residential
23510015	302 W Mt Diablo Av	1	Residential Medium	MDR	HDR	1	29	Residential
23510018	220 W Mt Diablo Av	1	Residential Medium	MDR	HDR	0	30	Residential
23510024	130 W Mt Diablo Av	1	Residential Medium	MDR	HDR	1	28	Residential
23510042	90 W Mt Diablo Av	1.5	Residential Medium	MDR	HDR	1	44	Residential
23510071	280 W Mt Diablo Av	1.3	Residential Medium	MDR	HDR	0	37	Residential
23510072	Intersection of Mt Oso Ave and Gianelli St	0.7	Residential Medium	MDR	HDR	0	21	Residential
23510073	250 W Mt Diablo Av	2	Residential Medium	MDR	HDR	1	57	Residential
23512001	205 E Third St	2.9	Residential Medium	MDR	HDR	1	86	Residential
23515002	780 E Sixth St	11.9	Downtown	M1	HDR	0	354	Vacant
23512002	207 E Third St	0.3	Residential Medium	MDR	HDR	0	9	Residential
23514009	Intersection of E 3rd St and E Mt Diablo Ave	2	Commercial	NS	HDR	0	60	Vacant
23514010	Intersection of E Mt Diablo Ave and S MacArthur Dr	1.2	Commercial	NS	HDR	0	36	Vacant
23542005	550 W Fourth St	0.3	Residential Medium	MDR	HDR	0	9	Church, Synagogue Or Temple
23542006	491 W Mt Diablo Av	0.6	Residential Medium	MDR	HDR	0	17	Church, Synagogue Or Temple
23542007	524 W Fourth St	0.5	Residential Medium	MDR	HDR	1	15	Residential
23542008	489 W Mt Diablo Av	0.9	Residential Medium	MDR	HDR	0	25	Church, Synagogue Or Temple
23542009	510 W Fourth St	0.8	Residential Medium	MDR	HDR	1	21	Residential
23542012	440 W Fourth St	0.5	Residential Medium	MDR	HDR	0	16	Vacant
23542013	E of intersection of Diablo Pl and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	15	Vacant
23543006	251 W Mt Diablo Av	0.9	Residential Medium	MDR	HDR	1	25	Residential
23543009	211 W Mt Diablo Av	0.3	Residential Medium	MDR	HDR	0	8	Residential
23543011	201 W Mt Diablo Av	0.3	Residential Medium	MDR	HDR	0	8	Residential
23543013	10009 W Mt Diablo Av	0.4	Residential Medium	MDR	HDR	0	11	Residential
23543014	W of intersection of West St and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	16	Residential
23543016	W of intersection of C St and W Mt Diablo Ave	0.5	Residential Medium	MDR	HDR	0	14	Residential
23543017	100 W South St	0.6	Residential Medium	MDR	HDR	1	16	Residential
23543018	90 W South St	0.6	Residential Medium	MDR	HDR	1	16	Residential
23543019	70 W South St	1.1	Residential Medium	MDR	HDR	1	32	Residential
23805002	1381 Berg Av	2.6	Residential Medium	MDR	HDR	0	76	Residential
23805003	2748 W Byron Rd	1	Residential Medium	MDR	HDR	2	28	Residential
23805008	2718 W Byron Rd	1.7	Residential Medium	MDR	HDR	1	48	Residential
23805015	2600 W Byron Rd	1.1	Commercial	GHC	HDR	2	29	Residential
23805016	2590 W Byron Rd	0.5	Residential Medium	MDR	HDR	2	13	Residential

APN	Address	Size (Acres)	General Plan Designation (Current)	Current Zoning	Proposed Zoning	Existing Units	Total Units	Existing Use
23805017	2568 W Byron Rd	0.5	Residential Medium	MDR	HDR	2	13	Residential
23805022	2430 W Byron Rd	1.3	Residential Medium	MDR	HDR	0	40	Residential
23805023	1341 Berg Av	1.1	Residential Medium	MDR	HDR	1	33	Residential
23806005	1240 Berg Av	0.5	Residential Medium	MDR	HDR	1	14	Residential
23806009	1180 Berg Av	1	Residential Medium	MDR	HDR	1	29	Residential
23806013	1150 Berg Av	1.2	Residential Medium	MDR	HDR	1	36	Residential
23806018	2881 Fabian Rd	1.1	Residential Medium	MDR	HDR	3	29	Residential
23806021	1191 Berg Av	0.8	Residential Medium	MDR	HDR	2	22	Residential
23806024	1241 Berg Av	0.8	Residential Medium	MDR	HDR	1	23	Residential
23806029	1121 Berg Av	0.8	Residential Medium	MDR	HDR	1	23	Residential
23807004	3150 W Byron Rd	0.6	Residential Medium	MDR	HDR	0	18	Residential
23807005	3160 W Byron Rd	0.5	Residential Medium	MDR	HDR	1	12	Residential
23807006	3130 W Byron Rd	1.1	Residential Medium	MDR	HDR	1	31	Residential
23807007	3110 W Byron Rd	1	Residential Medium	MDR	HDR	1	29	Residential
23807008	3090 W Byron Rd	1.1	Residential Medium	MDR	HDR	1	31	Residential
23860007	3140 W Grant Line Rd	3	Commercial	PUD	HDR	0	89	Residential
24005037	Intersection of W Schulte Rd and Mabel Josephine Dr	10	Urban Reserve 7	PUD	HDR	0	298	Vacant
24014027	4720 S Lammers Rd	5	Industrial	M1-TH	HDR	1	148	Agricultural
24614001	26805 S Mac Arthur Dr	10	Residential High	M1	HDR	0	298	Residential
24865041	546 Glenbrook Dr	1	Residential Low	PUD	HDR	1	29	Residential
24865042	545 Glenbrook Dr	1	Residential Low	PUD	HDR	0	30	Residential
25105008	27901 S Lammers Rd	5	Residential Medium	MDR-TH	HDR	0	149	Agricultural
25105009	28281 S Lammers Rd	10	Residential Medium	MDR-TH	HDR	0	298	Vacant
24802017	Intersection of S Tracy Blvd and Gandy Dancer Dr	14.3	Office	M1	New MU1	0	250	Residential
24803005	4800 S Tracy Bl	14.3	Office	M1	New MU1	0	250	Residential
24803010	4100 S Tracy Bl	11.8	Office	M1	New MU1	0	206	Residential
TOTAL		239.8				38	6588	

ATTACHMENT A-2 REZONE INVENTORY TABLE (Remainder)

APN	ADDRESS	EX_ZONING	PROP_ZONING	SITE_ACRES
235-440-07	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-08	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.08
235-100-74	85 MT OSO AVE	MDR	HDR	0.19
235-100-75	65 MT OSO AVE	MDR	HDR	0.19
235-100-76	45 MT OSO AVE	MDR	HDR	0.19
235-440-06	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-04	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-05	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-100-41	91 MT OSO AVE	MDR	HDR	0.95
235-100-25	125 MT OSO AVE	MDR	HDR	0.48
235-100-23	155 MT OSO AVE	MDR	HDR	0.48
235-100-21	175 MT OSO AVE	MDR	HDR	0.48
235-100-62	215 MT OSO AVE	MDR	HDR	0.48
235-100-61	225 MT OSO AVE	MDR	HDR	0.49
235-440-03	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.07
235-440-02	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	0.10
235-440-01	MT OSO AVE, EAST OF (ADJ TO) SOUTH SCHOOL PARK	MDR	HDR	2.08
235-100-22	150 W MT DIABLO AVE	MDR	HDR	0.49
235-100-20	170 W MT DIABLO AVE	MDR	HDR	0.49
235-100-66	370 W MT DIABLO AVE	MDR	HDR	0.73
235-210-09	19 S C ST	MDC	HDR	0.10
235-210-10	61 W MT DIABLO AVE	MDC	HDR	0.09
235-210-11	65 W MT DIABLO AVE	MDC	HDR	0.09
235-430-04	275 W MT DIABLO AVE	MDR	HDR	0.13
235-210-08	105 S C ST	MDC	HDR	0.12
235-210-07	85 S C ST	MDC	HDR	0.12
235-420-11	469 W MT DIABLO AVE	MDR	HDR	0.18
235-430-03	6 WEST ST	MDR	HDR	0.12
235-210-06	65 S C ST	MDC	HDR	0.12
235-210-05	45 S C ST	MDC	HDR	0.12
235-430-02	58 WEST ST	MDR	HDR	0.12
235-210-04	25 S C ST	MDC	HDR	0.12
235-430-35	MT DIABLO AVE BETWEEN W SOUTH ST AND C ST	MDR	HDR	0.16
235-420-10	449 W MT DIABLO AVE	MDR	HDR	0.52
235-210-03	56 W SOUTH ST	MDC	HDR	0.09
235-210-02	60 W SOUTH ST	MDC	HDR	0.08
235-210-01	66 W SOUTH ST	MDC	HDR	0.08
235-430-15	130 W SOUTH ST	MDR	HDR	0.66
235-430-12	190 W SOUTH ST	MDR	HDR	0.19
235-430-10	200 W SOUTH ST	MDR	HDR	0.25
235-430-34	212 W SOUTH ST	MDR	HDR	0.14
235-430-07	246 W SOUTH ST	MDR	HDR	0.18
235-430-05	256 W SOUTH ST	MDR	HDR	0.15
235-430-01	296 W SOUTH ST	MDR	HDR	0.16
235-420-15	375 W MT DIABLO AVE	MDR	HDR	3.12
235-420-14	416 W FOURTH ST	MDR	HDR	0.27
238-060-11	2721 FABIAN RD	MDR	HDR	0.66
238-060-12	2741 FABIAN RD	MDR	HDR	0.59
238-060-15	2831 FABIAN RD	MDR	HDR	0.66
238-060-16	2851 FABIAN RD	MDR	HDR	0.44
238-060-30	1151 BERG AVE	MDR	HDR	0.72
238-060-17	2861 FABIAN RD	MDR	HDR	0.49
238-060-10	1160 BERG AVE	MDR	HDR	1.03
238-060-19	1161 BERG AVE	MDR	HDR	0.86
238-060-20	1181 BERG AVE	MDR	HDR	0.81
238-060-08	1210 BERG AVE	MDR	HDR	0.50
238-060-07	1220 BERG AVE	MDR	HDR	0.47
238-060-06	1230 BERG AVE	MDR	HDR	0.51
238-060-22	1221 BERG AVE	MDR	HDR	0.82
238-060-23	1231 BERG AVE	MDR	HDR	0.81
238-060-04	1260 BERG AVE	MDR	HDR	0.71
238-060-03	1270 BERG AVE	MDR	HDR	0.55
238-060-25	1261 BERG AVE	MDR	HDR	0.45
238-060-26	1271 BERG AVE	MDR	HDR	0.35
238-060-27	1281 BERG AVE	MDR	HDR	0.82
238-060-02	1290 BERG AVE	MDR	HDR	1.33
238-060-28	1301 BERG AVE	MDR	HDR	0.80
238-050-12	1320 BERG AVE	MDR	HDR	0.31
238-050-11	2688 W BYRON RD	MDR	HDR	1.04
238-050-18	2550 W BYRON RD	MDR	HDR	1.06
238-050-10	2686 W BYRON RD	MDR	HDR	0.26
238-050-09	2684 W BYRON RD	MDR	HDR	0.49
238-050-07	2698 W BYRON RD	MDR	HDR	0.23
238-050-06	2710 W BYRON RD	MDR	HDR	0.85
238-050-05	2726 W BYRON RD	MDR	HDR	0.70
238-050-04	2734 W BYRON RD	MDR	HDR	0.37
238-070-09	3060 W BYRON RD	MDR	HDR	1.11
238-070-03	3190 W BYRON RD	MDR	HDR	1.30
238-070-02	3220 W BYRON RD	MDR	HDR	1.55
214-430-17	250 W CLOVER RD	MDC	HDR	0.21
214-430-16	232 W CLOVER RD	MDC	HDR	0.25
214-430-03	324 W CLOVER RD	MDC	HDR	0.83
214-430-25	172 W CLOVER RD	MDC	HDR	0.49
214-430-15	236 W CLOVER RD	MDC	HDR	0.26
214-430-08	280 W CLOVER RD	MDC	HDR	0.49
214-430-06	282 W CLOVER RD	MDC	HDR	0.51
214-430-18	202 W CLOVER RD	MDC	HDR	0.53
214-430-19	208 W CLOVER RD	MDC	HDR	0.05
214-430-02	332 W CLOVER RD	MDC	HDR	0.31
214-430-14	242 W CLOVER RD	MDC	HDR	0.20
214-430-43	246 W CLOVER RD	MDC	HDR	0.16
214-430-20	212 W CLOVER RD	MDC	HDR	0.15
214-430-21	216 W CLOVER RD	MDC	HDR	0.13
214-430-28	108 W CLOVER RD	MDC	HDR	0.42
214-430-27	134 W CLOVER RD	MDC	HDR	0.96
214-430-26	150 W CLOVER RD	MDC	HDR	0.29
214-430-24	136 W CLOVER RD	MDC	HDR	0.47
214-430-22	222 W CLOVER RD	MDC	HDR	0.10
214-430-42	W CLOVER RD AT W GABRIEL DR	MDC	HDR	0.44
214-430-07	276 W CLOVER RD	MDC	HDR	0.38
214-430-05	286 W CLOVER RD	MDC	HDR	0.42
238-060-01	1311 BERG AVE	MDR	HDR	0.82



MUWEKMA OHLONE INDIAN TRIBE

OF THE SAN FRANCISCO BAY AREA REGION

'Innu Huššištak Makiš Mak-Muwekma "The Road To The Future For Our People"

July 5, 2024

TRIBAL CHAIRPERSON

CHARLENE NIJMEH

**EXECUTIVE DIRECTOR OF
CULTURAL RESOURCES/MLD**

RICHARD MASSIATT

TRIBAL COUNCIL

**JOANN BROSE
FRANK RUANO
SHEILA SCHMIDT
CAROL SULLIVAN**

**TRIBAL ARCHAEOLOGIST
AND ETHNOHISTORIAN**

ALAN LEVENTHAL

Mr. Craig Hoffman, Senior Planner

City of Tracy

333 Civic Center Plaza

Tracy, CA 95376

Email: craig.hoffman@cityoftracy.org

Dear Mr. Hoffman,

Thank you for contacting our Tribal administration with regards to the City's Notice of Preparation and Scoping Meeting for the Draft Environmental Impact Report for City of Tracy Rezone Program and General Plan Amendment Scoping Meeting: July 10, 2024 at 7pm. Planning Commission Hearing, at the Tracy City Council Chambers.

The City of Tracy is informing our Tribe of their intention of amending their General Plan. In your letter you state that "The proposed project analyzes the environmental impacts related to a rezoning program to accommodate regional housing needs, and a targeted update to the City's General Plan, including the Land Use Element, Circulation Element, Safety Element, and the of an Environmental Justice Element. No specific development projects are proposed as part of the project."

Our principal response is that the Muwekma Ohlone Tribal leadership respectfully requests to be included in this process by establishing tribal consultation meetings with the City of Tracy as proscribed under the provisions of the California Environmental Quality Act (CEQA), California Public Resources Code, SB 18, and AB 52 relative to the mitigation of potential adverse impacts to any of our recorded and unrecorded tribal ancestral heritage sites that may exist within any current and/or proposed construction projects located within the boundaries of the City of Tracy.

The Muwekma Ohlone Tribe of the San Francisco Bay Area requests formal notification and information for any such projects, and any projects within the City's geographical jurisdiction. Furthermore, we request consultation under extant state laws and statutes that includes any and all negative declarations, determinations of significance, proposed mitigation measures, that potentially addresses any significant adverse impacts to our ancestral heritage village and cemetery sites, relative to specific projects under the jurisdiction of the City of Tracy and its agencies.

As you may already know the City of Tracy falls within of ethnohistoric tribal territory to which we have direct lineal descent of ancestral tribal groups within and surrounding the greater Tracy area which include the Tamcan, Josmte of the greater Byron-Tracy region, and the neighboring Pasasimne, Yatchicumne, Lacquisemne Delta/North Valley Yokut-speaking tribes, and the Luecha and Ssoaom Ohlone-Speaking tribes that were missionized into Mission San Jose. (see BAE John Peabody Harrington's interviews of Muwekma Elders 1925-1934; Milliken 1995, 2008, Milliken et al. 2009).

Muwekma Ohlone Tribe of the San Francisco Bay Area

1169 S. Main Street, Ste.#336 Manteca, CA 95337

Our Tribe has been engaged in CRM work since the mid-1980s and have published many archaeological reports pertaining to our ancestral heritage sites and human remains including recent burial recovery field work at several sites in the Sunol region under the jurisdiction of the San Francisco Public Utilities Commission and Caltrans: **CA-ALA-565** which our Tribe named ***Sii Túupentak*** meaning **Place of the Water Roundhouse Site**; **CA-ALA 677 *Ayttakiš 'Éete Hiramwiš Trépam-tak*** (**Place of Woman Sleeping Under the Pipe**); and **CA-ALA-704 *Rummey Ta Kuččuwiš Tiprectak*** (**Place of the Stream of the Lagoon Site**). We have also co-authored many journal articles with many scholars from various universities and private CRM firms on our ancestral remains, ceremonial grave regalia, AMS dating, Stable Isotope, and modern and aDNA studies (see attached).

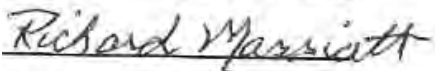
Furthermore, as you may already know, our Tribe is a previously federally recognized tribe historically identified by the Bureau of Indian Affairs as the **Verona Band of Alameda County** which was never terminated by any act of Congress. Our aboriginal territory includes direct descent within the greater San Francisco Bay Region and specifically from the greater Tracy area.

We are attaching other historic documents and an examples of our previous ancestral heritage recovery work for your review and consideration. and look forward in working closely with you and the City of Tracy on any future related projects within our ethnohistoric homeland.

Sincerely,



Charlene Nijmeh, Chairwoman, Muwekma Ohlone Tribe



Richard Massiatt, Executive Director CRM and MLD Muwekma Ohlone Tribe



Alan Leventhal, Muwekma Ohlone Tribal Archaeologist

Cc: Muwekma Tribal Council
Cultural Resources File:
City of Tracy General Plan Project
Attachments

APPENDIX F

Water Supply and Wastewater Treatment Capacity Evaluations

TECHNICAL MEMORANDUM

DATE: July 8, 2024

Project No.: 487-60-24-35

SENT VIA: EMAIL

TO: Ben Ritchie, De Novo Planning Group

CC: William Crenshaw, De Novo Planning Group
Christina Erwin, De Novo Planning Group

FROM: Josh Steiner, EIT #168371
Elizabeth Drayer, PE, RCE #46872

REVIEWED BY: Doug Moore, PE, RCE #58122

SUBJECT: Water Supply and Wastewater Treatment Capacity Evaluations – EIR for the City of Tracy Housing Element, Rezoning, and General Plan Amendment

West Yost is pleased to provide these planning level analyses for water supply and wastewater treatment infrastructure as it relates to the City of Tracy (City) Rezone Program and General Plan Amendment. The information summarized in this Technical Memorandum (TM) will support the Environmental Impact Report (EIR), which will address whether water supply and wastewater treatment capacities will be adequate in serving the growth projections inclusive of the City's rezone program and General Plan Amendment.

Key topics included in this TM include:

- Summary and Conclusions
- Water Supply and Demands
- Wastewater Treatment Capacity and Flows
- General Plan Growth Projections
- Recommended Water Supply Improvements
- Recommended Wastewater Treatment Improvements

SUMMARY AND CONCLUSIONS

With the water supply infrastructure and water conservation measures identified for buildout of the City in the City's Citywide Water System Master Plan (WSMP) and 2020 Urban Water Management Plan (2020 UWMP), the City will have adequate water supplies for the buildout with the proposed Rezone Program and General Plan Amendment growth projections. The following is a summary of existing water supplies, demands, and recommended improvements to meet the City's Rezone Program and General Plan Amendment growth projections:

- The City currently receives potable water from four main sources including the Central Valley Project, the Byron Bethany Irrigation District, the Stanislaus River, and from nine groundwater wells located within the City. In addition, the City plans on utilizing an Aquifer Storage and Recovery (ASR) program and indirect reuse of recycled water to meet future demands.
- The City's Citywide Water System Master Plan (WSMP) and 2020 Urban Water Management Plan (2020 UWMP) evaluated the City's existing and future water supplies and their availability and reliability to meet projected future water demands for near-term (2025), future (2040) and General Plan buildout (assumed to be 2045 in the 2020 UWMP) conditions. The development conditions associated with each of these timeframes were defined by the City's Planning Department and included 4,834 new dwelling units by 2025, 15,609 new dwelling units by 2040 and 24,960 new dwelling units by buildout (assumed to be 2045 in the 2020 UWMP).
- The City had a 2020 water demand of 19,527 acre-feet per year (af/yr), which is projected to increase to 39,379 af/yr by buildout of the General Plan. The buildout (2045) demand is anticipated to be met with both potable water supplies and recycled water supplies. The buildout (2045) potable water demand is projected to be 33,079 af/yr and the buildout (2045) recycled water demand is projected to be 6,300 af/yr.
- The results of the water supply assessment provided in the WSMP and 2020 UWMP show that current water supplies are sufficient in meeting buildout demands during normal years. However, during single dry years or multiple dry years, the City must depend more heavily on water conservation efforts, use of groundwater supplies, and proposed future water supply projects.
- The proposed Rezone Program and General Plan Amendment would result in up to 21,355 new dwelling units by 2045. This means that the development assumed in the WSMP (up to 24,960 new dwelling units by buildout/2045) encompasses the development proposed under the Rezone Program and General Plan Amendment, although the timing of the proposed development assumed in the WSMP does not specifically align with the development timing assumed for the Rezone Program and General Plan Amendment.
- This also means that water demand projections provided in the City's WSMP (and the City's 2020 UWMP) also encompass the water demand projections associated with the proposed Rezone Program and General Plan Amendment. As such, the analysis provided in the City's WSMP and the City's 2020 UWMP with regard to the availability and reliability of water supplies to meet projected water demands is valid for the proposed Rezone Program and General Plan Amendment, and findings and recommendations remain unchanged from those described in the City's WSMP and 2020 UWMP and as summarized above.
- Similarly, infrastructure improvements recommended in the City's WSMP (including new water storage tanks, groundwater wells, pumping facilities, and pipelines) are also valid, although the timing of specific water system improvements may require adjustments based on the actual timing of the future developments. Also, as described in the City's WSMP, the City's water system is configured and operated based on distinct pressure zones. As such, specific water system improvements may require adjustments based on the actual development within a specific pressure zone.

With the wastewater treatment plant infrastructure identified for buildout of the City in the July 2023 City of Tracy Wastewater Master Plan Update (WWMPU) and the 2022 Tracy Wastewater Treatment Plant Facilities Plan (Facilities Plan), the City will have adequate wastewater treatment capacity for buildout with the proposed Rezone Program and General Plan Amendment growth projections. The following is a summary of existing wastewater treatment capacities, flows, and recommended improvements to meet the City's Rezone Program and General Plan Amendment growth projections:

- The City wastewater treatment plant (WWTP) treats average dry weather flows (ADWFs) and peak wet weather flows (PWWFs) of 7.36 million gallons per day (MGD) and 16.95 MGD, respectively. As specified in the July 2023 City of Tracy Wastewater Master Plan Update (WWMPU)¹, buildout ADWFs and PWWFs are projected to increase to 15.65 MGD and 30.13 MGD, respectively.
- Planned improvements for the City WWTP are presented in the 2022 Tracy WWTP Facilities Plan (Facilities Plan). Projected ADWFs and PWWFs planned for in the Facilities plan are 21.1 MGD and 49.2 MGD, respectively. 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 ADWFs 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.

WATER SUPPLY AND DEMANDS

The following sections provide relevant background information as it relates to the City's current and projected water supply and demands.

CITY OF TRACY CITYWIDE WATER SYSTEM MASTER PLAN UPDATE AND 2020 URBAN WATER MANAGEMENT PLAN

The City of Tracy Citywide Water System Master Plan (WSMP) Update was completed by West Yost in May 2023 (and adopted by the Tracy City Council in April 2024) and provides an evaluation of the required backbone potable water and recycled water system facilities required to serve existing and future needs. The WSMP evaluates the City's existing and future water supplies and their availability and reliability to meet projected future water demands for near-term (2025), future (2040) and General Plan buildout conditions.¹ The development conditions associated with each of these timeframes were defined by the City's Planning Department and included 4,834 new dwelling units by 2025, 15,609 new dwelling units by 2040 and 24,960 new dwelling units by buildout.² The WSMP includes recommended capital improvement plans for both the potable water and recycled water systems to meet future system needs.

The City of Tracy 2020 UWMP was completed by EKI Environment & Water (EKI) in June 2021 and provides an evaluation of the City's existing and future water supplies and their availability and reliability to meet projected future water demands through 2045.³ The UWMP serves as a foundational planning document and includes descriptions of historical and projected water demands and the City's water supplies and their associated reliability over a more than 20-year planning horizon. The UWMP also describes the actions the City is taking to promote water conservation, both by the City itself and by its customers (referred to as "demand management measures"), and includes a plan to address potential water supply shortages such as drought or other impacts to supply availability (the Water Shortage Contingency Plan [WSCP]). The UWMP is updated every five years in accordance with State of California requirements under the Urban Water Management Planning Act and amendments (Division 6 Part 2.6 of the California Water Code [CWC] §§10610 – 10656).

Water supply assumptions and water demand projections contained in the WSMP and 2020 UWMP are generally consistent and based on current and anticipated conditions.

EXISTING 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);
- Treated 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.

¹ The City's Citywide Water System Master Plan assumed that buildout would occur sometime after 2040, but no specific year was assumed. The City's Wastewater Master Plan Update and the Tracy WWTP Facilities Plan does not disclose a specific year for buildout conditions.

² City of Tracy Citywide Water Supply Master Plan, Table 3.2 Projected Development by Time Frame with the City's Sphere of Influence, May 2023.

³ The City's 2020 UWMP conservatively assumed that buildout would occur in 2045.

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.

Each of these existing supplies is described below.

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.⁴

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.⁵ 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.

⁴ 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.

⁵ Escalon Amendment to Tracy- SSJID Water Supply Development Agreement, March 2006.

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 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.⁶

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.

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 Amendment⁷. 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.⁸

Groundwater

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.⁹ 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.

⁶ City of Tracy 2020 UWMP, June 2021, Section 7.1.1.3.

⁷ Per Appendix G of the City's 2020 UWMP, if it is assumed that the Bay-Delta Plan Amendment is implemented, the SCWSP supply under normal years would be reduced to 75 percent of the contract amount and under single dry and multiple dry years would be reduced to 36 percent of the contract amount.

⁸ City of Tracy 2020 UWMP, June 2021, Section 7.1.1.2.

⁹ Groundwater Assessment for Drought Emergency Conditions Requiring Groundwater to be Used as the Sole Source of Potable Water Supply, GEI Consultants, Inc., Bookman-Edmonston Division, August 2015.

The City may sustainably pump up to 9,000 af/yr from the local groundwater basin. Since the hard, high Total Dissolved Solids (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 from historical higher quantities, 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). The City's groundwater supplies are considered to be 100 percent reliable.

ADDITIONAL PLANNED FUTURE POTABLE WATER SUPPLIES

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

ASR Program Expansion

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.

Recycled Water Distribution Network and Exchange Program for Additional CVP Water Supplies

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.

RECYCLED WATER

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.

SUMMARY OF EXISTING AND ADDITIONAL PLANNED FUTURE WATER SUPPLIES

Table 1 provides a summary of the City’s existing and additional planned future water supply entitlements.

Table 1. Summary of Existing and Additional Planned Future Water Supplies

Supply	Water Supply Entitlement, af/yr	Supply Currently Used by City
Existing Water Supplies		
USBR CVP - Tracy Contract ^(a)	10,000	Yes
USBR CVP - BCID Contract ^(b)	5,000	Yes
USBR CVP - WSID Contract ^(c)	5,000	Yes
BBID (pre-1914) ^(d)	3,330	Yes
SCWSP (SSJID) (pre-1914) ^(e)	11,120	Yes
Groundwater ^(f)	9,000	Yes
Dry Year Supplies		
Semitropic Water Storage Bank ^(g)	3,500	Yes
Aquifer Storage and Recovery	700	Yes
Additional Planned Future Water Supplies		
Aquifer Storage and Recovery (Expanded)	300	No
Additional USBR CVP (BBID contract) ^(h)	—	No
Recycled Water Exchange (Potable)	7,500	No
Recycled Water (for non-potable uses) ⁽ⁱ⁾	6,300	No

Notes:

- a. M&I-reliability CVP water. Assumes the terms of the long-term renewal contract with the USBR are consistent with those of the interim renewal contract entered into between the City and USBR in February 2016.
- b. In June 2001, the USBR approved the assignment of 5,000 af/yr of BCID's contractual entitlement to Ag-reliability CVP water.
- c. In August 2001, the USBR approved the assignment of 2,500 af/yr of WSID's contractual entitlement to Ag-reliability CVP water, with the option to purchase an additional 2,500 af/yr in the future. In December 2013, the City and WSID approved the additional assignment; the City's current assignment of WSID CVP water is 5,000 af/yr.
- d. The City anticipates that up to 4,500 af/yr of BBID pre-1914 water will be available to serve the Tracy Hills Specific Plan development. This water is only available for use in the portion of Tracy Hills that lies within BBID Raw Water Service Area 2 the CVP Consolidated Place of Use, so the quantity of supply is limited to potable water demand in this area. Therefore, the maximum BBID supply delivered to this area is reduced to 3,330 af/yr.
- e. Includes the 10,000 af/yr allocation and the additional 1,120 af/yr obtained through the 2013 Lathrop-Tracy Purchase, Sale, and Amendment Agreement. Does not include the interim purchase from Escalon.
- f. 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. During 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.
- g. The City has purchased 10,500 af of water storage in the Stored Water Recovery Unit, which allows the City to withdraw up to 3,500 af/yr for three consecutive years.
- h. While up to 8,800 af/yr of BBID's Ag-reliability CVP water may be available as agricultural lands are converted to other uses, for purposes of water supply planning, the City assumes this supply will not be available.
- i. Based on the total projected recycled water demand at buildout in the City's WSMP Update.

EXISTING AND PROJECTED FUTURE 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 2 shows the City's water demand (based on water production) from 2012 to 2020.

Table 2. Historical Potable Water Demand									
Condition	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Water Demand, af/yr	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 in accordance with the City's General Plan within the City's water service area. However, as discussed above, the rate of growth within the City's water service area has slowed as a result of the Growth Management Ordinance (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.

The 2020 UWMP projected water demands are shown in Table 3. 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 in accordance with the City's General Plan. 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. Projected Water Demand as presented in the City's 2020 Urban Water Management					
Condition	2025	2030	2035	2040	2045
Potable Water Demand, af/yr	20,509	23,100	25,738	28,403	33,079
Recycled Water Demand, af/yr	1,000	2,067	3,133	4,200	6,300
Total Water Demand, af/yr	21,509	25,167	28,871	32,603	39,379

Source: City of Tracy 2020 UWMP, Table 4-8 Gross Water Use, June 2021.

It should be noted that the City’s 2020 UWMP assumed that buildout would occur by 2045. The City’s WSMP projected the City’s future water demands for the following timeframes: 2025 (near-term), 2040, and buildout (with no specific year assumed for buildout). For the City’s WSMP, the buildout potable water demand was projected to be 33,500 af/yr and the buildout recycled water demand was projected to be 6,300 af/yr.¹⁰

FUTURE WATER SUPPLY SUFFICIENCY

Table 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 (2045) as presented in the City’s 2020 UWMP. 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 25 percent water conservation goal.

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 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.

¹⁰ The projected water demands at buildout presented in the City’s WSMP are slightly different than those presented in the City’s 2020 UWMP for 2045 due to minor revisions in future land use projections following the completion of the City’s 2020 UWMP. Also, as noted above, the City’s WSMP did not assume a specific year for buildout, while the City’s 2020 UWMP conservatively assumed buildout would occur in 2045.

Table 4. Summary of Buildout (2045) Total Water Supply Versus Demand During Hydrologic Normal, Single Dry, and Multiple Dry Years as presented in the City's 2020 Urban Water Management Plan

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%
Year 4	Available Total Water Supply	32,071
	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: City of Tracy 2020 UWMP, Table 7-6 Normal Year Supply and Demand Comparison, Table 7-7 Single Dry Year Supply and Demand Comparison, and Table 7-8 Multiple Dry Year Supply and Demand Comparison, June 2021.

WASTEWATER TREATMENT CAPACITY AND FLOWS

The following sections provide relevant background information as it relates to the City's current and projected wastewater treatment capacity and flows.

TRACY WASTEWATER TREATMENT PLANT FACILITIES PLAN

The Facilities Plan was completed by CH2M Engineers in September 2019 and updated in February 2022. The Facilities Plan summarizes treatment processes and costs associated with expanding the City's WWTP and identifies facilities improvements necessary to treat future flows and satisfy future National Pollutant Discharge Elimination System (NPDES) requirements. The Facilities Plan served as the basis for the WWTP Evaluation and Proposed Upgrades chapter contained in the WWMPU.

CITY OF TRACY WASTEWATER MASTER PLAN UPDATE

The WWMPU was completed by Carollo Engineers in July 2023 with objectives of identifying near-term (2025), future (2040), and buildout capacity and treatment deficiencies as well as developing and prioritizing a capital improvement program (CIP) to address identified deficiencies. The WWMPU contains relevant study area information, planning and evaluation criteria, flow monitoring results and hydraulic model development, and proposed capital improvements.

EXISTING WASTEWATER FLOWS AND FLOW FACTORS

A summary of existing land uses within the City of Tracy city limits and corresponding wastewater flow factors are shown in Table 5. Wastewater flow factors for each land use were developed in the WWMPU using collected flow monitoring data and the City GIS database. The wastewater flow factors shown in Table 5 are applied to a projected land use acreage as a means of estimating future average dry weather flows (ADWF).

Table 5. 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.

For future developments where the number of single-family residential or multi-family residential dwelling units (DU) are known, it was recommended that DU-based flow factors be used in place of the acreage-based flow factors presented in Table 5. The DU-based flow factors presented in the WWMPU for single-family residential and multi-family residential are 230 gallons per day per DU (gpd/DU) and 150 gpd/DU, respectively.

FUTURE AND BUILDOUT WASTEWATER FLOWS

The known developments summarized in Table 6 through 2040 and buildout were provided to Carollo during development of the WWMPU. Using the wastewater flow factors discussed in the previous section and data obtained by the City regarding development phasing, the additional near-term, future, and buildout ADWFs shown in Table 6 were established for each known development.

Table 6. Known Development Flows

Planning Area Name	Acreage	Planning Year ADWF, mgd		
		2025	2040	Buildout
UR 5 (Bright) (1)	170	0.00	0.18	0.00
UR 7 (Bright/Castro) (2)	112	0.03	0.10	0.00
Rocking Horse (3)	58	0.06	0.00	0.00
Tracy Village (4)	135	0.09	0.05	0.00
UR1 (5)	780	0.04	0.17	0.46
Ellis (6)	321	0.03	0.14	0.00
Ellis DA additional RGAs (7)	--	0.00	0.52	0.00
Avenues (8)	96	0.00	0.10	0.00
UR10 (9)	116	0.00	0.00	0.09
Tracy Hills (10)	2,732	0.27	1.03	0.54
Gateway (11)	535	0.10	0.25	0.09
UR6 (Cordes Ranch) (12)	1,730	0.10	0.60	0.05
UR4 (Bright Triangle) (13)	190	0.00	0.00	0.23
UR3 (Catellus) (14)	700	0.00	0.00	0.49
I-205 Expansion (15)	172	0.00	0.22	0.17
West Side Industrial (16)	487	0.12	0.24	0.00
East Side Industrial (17)	370	0.00	0.28	0.00
Larch Clover (18)	442	0.01	0.00	0.34
Chrisman Road (19)	116	0.00	0.00	0.09
Rocha (20)	91	0.00	0.00	0.13
Berg/Byron remainder (21)	56	0.01	0.00	0.09
Berg Road Subdivision (22)	10	0.02	0.00	0.00
SWC Valpico and Coral Hollow (23)	65	0.00	0.00	0.06
Kagehiro (24)	47	0.01	0.00	0.00
Dobler/Maibes (25)	23	0.00	0.02	0.00
Holly Sugar Industrial (26)	160	0.00	0.09	0.00
Northeast Industrial Area	906	0.19	0.07	0.00
I-205 Specific Plan	620	0.00	0.03	0.00
Total	11,240	1.08	4.09	2.83

Source: City of Tracy 2023 WWMPU, Tables 2.3/4.6 Known Development/Known Development Flows, July 2023.

In addition to the known development data, the City also provided Carollo with infill information. The same flow factor methodology used to calculate the known development flows shown in Table 6 was used to calculate infill flows. PWWFs were determined by routing the 10-year, 24-hour design storm through the calibrated hydraulic model for all planning horizons under the assumption that peak inflow and infiltration (I/I) rates from known developments would average 500 gpd/ac and peak I/I rates from infill development would follow the same pattern as its associated flow monitoring basin. The resulting projected ADWFs and PWWFs for existing, 2040, and buildout conditions are shown in Table 7.

Table 7. Existing and Projected Wastewater Flow Summary		
Planning Horizon	ADWF, mgd	PWWF, 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.

WASTEWATER TREATMENT CAPACITY

Chapter 7 of the City of Tracy WWMPU contains a WWTP evaluation and proposed WWTP upgrades. In Chapter 7, it is stated that the City 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 aeration basins, 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 horizons are 25.35 MGD and 30.14 MGD. The City NPDES permit currently limits ADWF discharge from the WWTP at 10.8 MGD but notes that planned expansions will increase this limit to 16 MGD in the future.

As discussed in the Facilities Plan, the governing capacity of the Tracy WWTP is process dependent and defined by either hydraulic loading or solids loading. The City is currently performing upgrades to the outfall pipeline, which will increase the outfall capacity from 9 MGD to 16 MGD. Upon completion of the outfall pipeline, however, the WWTP will be capacity limited by the aeration basins, which currently has a maximum hydraulic capacity of 9 MGD and a maximum biological oxygen demand (BOD) loading rate of 16,500 lb/day. Planned upgrades to the aeration basins will increase the ADWF hydraulic capacity to 12.5 MGD and the average BOD loading rate to 22,000 lb/day. The WWPMU estimates the current City population to be 95,931 and the WWTP Facilities Plan estimates per capita BOD loading at 0.211 lb/person/day, which results in a current BOD loading rate of 20,241 lb/day.

Upon completion of the aeration basin improvements, the City will move into design and implementation of WWTP upgrade phases 3, 4, and 5, which are summarized in Table 8. Phase 3 represents processes that need to be upgraded before 2040, providing a design ADWF hydraulic capacity of 14.7 MGD, and phases 4 and 5 represents represent processes that need to be upgraded before buildout conditions, providing design ADWF hydraulic capacities of 18 MGD and 21.1 MGD, respectively.

Table 8. Phase 3, Phase 4, and Phase 5 WWTP Upgrades	
Phase 3 Upgrades (Hydraulic Capacity Upon Completion = 14.7 MGD ADWF)	
Grit Removal Basin #3	
Circular Clarifier #3	
Primary Sludge Pump Station #2	
Primary Effluent Equalization Tank #2	
Aeration Basin #5	
Secondary Clarifier #2	
New WAS and Mixed Liquor Pump Station	
Anaerobic Digester #4	
Remove 1975 Trickling Filters	
New Centrate Equalization Tank and Pump Station	
New Sludge Drying Bed #4	
Phase 4 Upgrades (Hydraulic Capacity Upon Completion = 18 MGD ADWF)	
Additional Influent Screen and Channel	
New Primary Effluent Equalization Pump Station	
New Outfall Pipeline	
Phase 5 Upgrades (Hydraulic Capacity Upon Completion = 21.1 MGD ADWF)	
Grit Removal Basin #4	
Circular Clarifier #4	
Primary Effluent Equalization Tank #3	
Conventional Deep Bed Filters #11 and #12	
New Additional UV Banks	
Anaerobic Digester #5	
New Digested Sludge Holding Tank	
New Larger Centrifuges	
Source: Tracy WWTP Facilities Plan, Table 9-2. Recommended Project Phasing Summary, Feb 2022.	

GENERAL PLAN GROWTH PROJECTIONS

The City Planning Department produced the Notice of Preparation (NOP) for the Draft Environmental Impact Report (EIR) for the City of Tracy Rezone Program and General Plan Amendment dated June 14, 2024, which is included as Attachment A. The projected new growth summarized in the EIR is from the following sources:

Rezone Sites: To accommodate the City’s Regional Housing Needs Allocation (RHNA) units plus a buffer for each of the income categories, opportunity sites would be rezoned to ensure the ability to develop housing at specified densities. The rezones identified in the Rezone Program and General Plan Amendment totals approximately 240 acres and would accommodate 6,588 units. The specific locations for these rezone areas are included in Attachment A.

Zoning Code Revisions: In addition to the rezone sites, the Rezone Program and General Plan Amendment includes proposed density increases to accommodate the RHNA shortfall, as well as a new mixed use zoning district. The following zoning code amendments and density increases are proposed as part of the Rezone Program and General Plan Amendment:

- MDR – from 5.9-12 DU/acre to 5.9-20 DU/acre
- MDC – from 5.9-12 DU/acre to 5.9-20 DU/acre
- HDR – from 12-25 DU/acre to 20-35 DU/acre
- GHC – from 12-25 DU/acre to 20-35 DU/acre
- 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 Plan 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 and 2045 is assumed to be the future buildout year.

The total projections in population, housing units, and jobs as a result of the Rezone Program and General Plan Amendment are summarized in Table 9. In total, the proposed Rezone Program and General Plan Amendment would result in up to 21,355 DUs and 50,995 new jobs.

Table 9. Development Capacity				
Growth Condition	Population	Dwelling Units	Jobs	Jobs per Dwelling Unit
Existing Conditions (2024)	96,076	29,653	39,921	1.35
Growth Potential (Over Existing Conditions)				
Current General Plan	32,797	15,051	55,839	3.71
Revised General Plan ^a	53,223	21,355	50,995	2.39
Change in Growth from Current to Revised General Plan	20,426	6,304	-4,844	--
Buildout at 2045 (Existing plus Growth Potential)				
Current General Plan	128,873	44,704	95,760	2.14
Revised General Plan ^a	149,299	51,008	90,916	1.78
Change at Buildout from Current to Revised General Plan	20,426	6,304	-4,844	--
Source: Notice of Preparation - City of Tracy Rezone Program and General Plan Amendment Draft Environmental Impact Report, Table 1, May 2024.				
Notes:				
(a) The Revised General Plan includes the rezoned sites, the zoning code revisions, and other City-wide buildout developments.				

RECOMMENDED WATER SUPPLY IMPROVEMENTS

The following summarizes the effects from the proposed City Rezone Program and General Plan Amendment on the City's water supply capacity.

As described above, the City's WSMP evaluated the City's existing and future water supplies and their availability and reliability to meet projected future water demands for near-term (2025), future (2040) and General Plan buildout (2045) conditions. The proposed Rezone Program and General Plan Amendment would result in up to 21,355 new dwelling units by 2045. This means that the development assumed in the WSMP (up to 24,960 new dwelling units by buildout) encompasses the development proposed under the Rezone Program and General Plan Amendment, although the timing of the proposed development assumed in the WSMP does not specifically align with the development timing assumed for the Rezone Program and General Plan Amendment.

This also means that water demand projections provided in the City's WSMP (and the City's 2020 UWMP) also encompass the water demand projections associated with the proposed Rezone Program and General Plan Amendment. As such, the analysis provided in the City's WSMP and the City's 2020 UWMP with regard to the availability and reliability of water supplies to meet projected water demands is valid for the proposed Rezone Program and General Plan Amendment, and findings and recommendations remain unchanged from those described in the City's WSMP and 2020 UWMP and as summarized above.

Similarly, infrastructure improvements recommended in the City's WSMP (including new water storage tanks, groundwater wells, pumping facilities, and pipelines) are also valid, although the timing of specific water system improvements may require adjustments based on the actual timing of the future developments. Also, as described in the City's WSMP, the City's water system is configured and operated based on distinct pressure zones. As such, specific water system improvements may require adjustments based on the actual development within a specific pressure zone.

RECOMMENDED WASTEWATER TREATMENT IMPROVEMENTS

The following sections summarize the effects from the proposed City Rezone Program and General Plan Amendment on the City's wastewater treatment capacity.

WASTEWATER FLOW PROJECTIONS

Revised buildout wastewater flow projections for the City Rezone Program and General Plan Amendment, shown in Table 10, can be estimated by first dividing the projected buildout ADWF found in Table 7 (15.65 MGD) by the total dwelling units proposed in the current General Plan found in Table 9 (44,704 DUs) to come up with a buildout flow factor of 350 gpd/DU. This buildout flow factor can then be applied to the revised General Plan DU count of 51,008 to come up with a revised ADWF of 17.86 MGD (a 12 percent increase from the current projection). As stated in the WWPMPU, the PWWF/ADWF factor is 1.93, meaning the revised PWWF for the Rezone Program and General Plan Amendment is 34.46 MGD (a 13 percent increase).

The revised buildout ADWF resulting from the Rezone Program and General Plan Amendment is 17.86 MGD. While the timing of proposed developments may not specifically align with the improvement phasing presented in the Facilities Plan, the buildout ADWF assumed in the Facilities Plan (21.1 MGD) encompasses the flows proposed under the Rezone Program and General Plan Amendment. As such, the analyses regarding wastewater treatment capacities presented in both the Facilities Plan are valid for the

proposed Rezone Program and General Plan Amendment and no additional WWTP improvements are necessary.

Table 10. Existing, Projected, and Revised Wastewater Flow Summary		
Planning Horizon	AWDF, mgd	PWWF, mgd
Existing Conditions	7.35	16.95
Current General Plan Buildout	15.65	30.14
Revised General Plan Buildout	17.86	34.46
WWTP Facilities Plan Buildout	21.10	49.20
Source: City of Tracy 2023 WWMPU, Tables 4.7/4.9 Existing and Projected ADWF Summary/Projected PWWF Summary, July 2023.		

WASTEWATER LOAD PROJECTIONS

Average buildout BOD load projections can be determined for each planning horizon by multiplying the respective population by the per capita BOD loading rate of 0.211 lb/person/day. This results in a revised average buildout BOD loading rate of 31,502 lb/day, which is a 36 percent increase from existing conditions and a 14 percent increase from current buildout conditions.

The revised average buildout BOD loading rate resulting from the Rezone Program and General Plan Amendment is 31,502 lb/day. While the timing of proposed developments may not specifically align with the improvement phasing presented in the Facilities Plan, the average buildout BOD loading rate assumed in the Facilities Plan (46,445 lb/day) encompasses the loads proposed under the Rezone Program and General Plan Amendment. As such, the analyses regarding wastewater treatment capacities presented in the Facilities Plan are valid for the proposed Rezone Program and General Plan Amendment and no additional improvements are necessary.

Table 11. Existing, Projected, and Revised BOD Loading Summary		
Planning Horizon	Population	Average BOD Loading Rate, lb/day
Existing Conditions	96,076	20,272
Current General Plan Buildout	128,873	27,192
Revised General Plan Buildout	149,298	31,502
WWTP Facilities Plan Buildout	--	46,445