

# Appendix A

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Environmental Assessment Worksheets

# **Attachment A1**

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Air Quality

## Air Quality (CEST and EA)

General Requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93
Reference		
<a href="https://www.hudexchange.info/environmental-review/air-quality">https://www.hudexchange.info/environmental-review/air-quality</a>		

### Scope of Work

- 1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

Yes

→ Continue to Question 2.

No

Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

### Air Quality Attainment Status of Project's County or Air Quality Management District

- 2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

No, project's county or air quality management district is in attainment status for all criteria pollutants

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants.

Describe the findings:

The project is located within the Mountain Counties Air Basin, which is in nonattainment for the state standards for ozone (CARB 2017) and the 2015 federal standard for ozone (EPA 2018).

→ Continue to Question 3.

3. Determine the **estimated emissions levels of your project for each of those criteria pollutants** that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Explain how you determined that the project would not exceed *de minimis* or threshold emissions.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ Continue to Question 4. Explain how you determined that the project would not exceed *de minimis* or threshold emissions in the Worksheet Summary.

4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project would result in minor and temporary construction-related air quality emissions (fugitive dust and vehicle exhaust). To ensure the project would not exceed the thresholds required for a conformity finding under the Clean Air Act, emissions modeling was conducted for construction activities associated with the community resilience center. Further, to reduce dust exposure to nearby existing land uses (e.g., tot lot, residences), Minimization Measure 1 is recommended.

Based on modeling conducted, emissions would not exceed de minimis levels for any criteria air pollutant in nonattainment or maintenance within Tuolumne County. See attached emissions modeling and discussion.

**Are formal compliance steps or mitigation required?**

Yes

No

## AIR QUALITY EMISSIONS MODELING

### Existing Environmental Setting

The project site is located in Tuolumne County and in the Mountain Counties Air Basin (MCAB). The MCAB violates the state ozone standard due to transport (i.e., air migration across air district lines) from the Sacramento Valley, the San Joaquin Valley, and the San Francisco Bay Area. The region is in attainment for the federal 1-hour standard, except for the western portions of El Dorado and Placer counties, which are part of the Sacramento federal nonattainment area. Because the California Air Resources Board (CARB) has determined that the region's ozone violations are the result of transport of emissions into the MCAB (California Air Pollution Control Officers Association [CAPCOA] 2015), requirements in the California Clean Air Act (CCAA) that would affect the air quality planning process of the local air districts have not been triggered. Instead, the region will benefit principally from emission reductions in the upwind areas through the application of "all feasible measures" (CARB 2001).

The Tuolumne County Air Pollution Control District (TCAPCD) is responsible for implementing emissions standards and other requirements of federal and state laws regarding most types of stationary emission sources. CARB has determined that the ozone levels in Tuolumne County are caused by "overwhelming transport" of emissions into the air district (CAPCOA 2015). Therefore, TCAPCD is relieved from preparing an attainment plan for ozone, and no other criteria air pollutant levels are high enough to require an attainment plan. Although there are no required attainment plans, or other local plans specifically addressing air quality, Tuolumne County must conform to existing state and federal air quality standards.

If an area has not achieved the National Ambient Air Quality Standards (NAAQS) or the California Ambient Air Quality Standards (CAAQS) for any criteria pollutant, EPA and CARB classifies it as a nonattainment area for the respective criteria pollutant. The Tuolumne County portion of the MCAB is in nonattainment for the 2015 8-hour ozone (2015) standard. Ozone is generated from the combination of volatile organic gases (VOCs) and oxides of nitrogen (NO<sub>x</sub>). As such, these are the criteria air pollutants of concern when evaluating ozone. Attainment status of criteria air pollutants for Tuolumne County is shown below in Table 1.

**Table 1**      **Attainment Status Designations for Tuolumne County**

Pollutant	National Designation	State Designation
Ozone	Nonattainment	Nonattainment
PM <sub>10</sub>	Attainment	Unclassified
PM <sub>2.5</sub>	Attainment	Unclassified
CO	Attainment	Attainment
NO <sub>2</sub>	Attainment	Attainment
SO <sub>2</sub>	Attainment	Attainment
Lead (Particulate)	Attainment	Attainment

Notes: CO = carbon monoxide; NO<sub>2</sub> = nitrogen dioxide; PM<sub>2.5</sub> = fine particulate matter; PM<sub>10</sub> = respirable particulate matter; SO<sub>2</sub> = sulfur dioxide

Source: CARB 2015 and EPA 2018

### Regulatory Setting

EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments to the CAA were made by Congress were in 1990.

EPA promulgated the General Conformity Rule on November 30, 1993, in Volume 58 of the Federal Register (FR) Page 63214 (58 FR 63214) to implement the conformity provision of Title I, Section 176(c) of the

federal CAA (42 United States Code Section 7506(c)). Section 176(c)(1) requires that the federal government not engage, support, or provide financial assistance for, permit or license, or approve any activity that fails to conform to an approved State Implementation Plan.

Under the General Conformity Rule, federal agencies must work with state, tribal, and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plans established in the applicable state or tribal implementation plan. The primary functions of the General Conformity Rule are to:

- ▲ Ensure that federal activities do not cause or contribute to new violations of NAAQS;
- ▲ Ensure that actions do not cause additional or worsen existing violations of or contribute to new violations of the NAAQS; and
- ▲ Ensure that attainment of the NAAQSs is not delayed.

The General Conformity regulation contains *de minimis* levels that, below which, a project would not be considered to substantially interfere with attainment of NAAQS associated with air quality planning efforts. If a project would exceed the *de minimis* levels, the project would be subject to a General Conformity Determination. As summarized in Table 2, the project area is designated nonattainment for federal standard for ozone. *De minimis* levels are summarized in Table 2.

**Table 2** General Conformity De Minimis Levels

Pollutant	Attainment Designation	De minimis level (tons/year)
Ozone (ROG and NO <sub>x</sub> )	Nonattainment (Marginal)	100

Notes: NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = fine particulate matter; PM<sub>10</sub> = respirable particulate matter; VOC = volatile organic compounds.  
Sources: EPA 2014

## Environmental Effects and Minimization Measures

Implementation of the proposed action would result in construction and operation of a 12,000 square foot community resilience center in Tuolumne County. Construction and operational emissions of NO<sub>x</sub> and ROG were modeled in accordance with industry-accepted methodologies using project specifications (e.g., construction schedule, and duration, land use, location), and default settings and parameters contained in the California Emissions Estimator Model (CalEEMod). Default data (e.g., emission factors) is built into the model and provided by the various California air districts to account for local conditions. Input parameters were based on project-specific information, default model settings, and reasonably conservative assumptions. The modeled construction emissions are summarized in Table 3.

**Table 3** Summary of Modeled Emissions of Criteria Air Pollutants and Precursors

	ROG (Construction/Operation)	NO <sub>x</sub> (Construction/Operations)
Maximum Tons Per Year	<1/<1	1.6/1
De minimis levels (tons per year)	100	100
Notes: ROG = reactive organic gases NO <sub>x</sub> = oxides of nitrogen See Appendix A for detail on model inputs, assumptions, and project specific modeling parameters. Source: Modeling Conducted by Ascent Environmental in 2018		

As shown in Table 3, project construction and operation would not exceed federal *de minimis* levels. Thus, short-term construction-related and long-term operational emissions of criteria air pollutants would not have the potential to exceed applicable ambient air quality standards. Project-generated emissions would not violate or contribute substantially to an existing or projected air quality violation.

## References

California Air Pollution Control Officer's Association. 2015. *California's Progress Toward Clean Air*. Available: [https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/air-quality-docs/progress\\_report\\_2015.pdf?sfvrsn=ca23ee89\\_2](https://www.co.shasta.ca.us/docs/libraries/resource-management-docs/air-quality-docs/progress_report_2015.pdf?sfvrsn=ca23ee89_2). Accessed June 11, 2017.

California Air Resources Board. 2001. (April). *Ozone Transport: 2001 Review*. Available: <https://www.arb.ca.gov/research/apr/reports/l3067.pdf>. Accessed June 10, 2018.

———. 2015. Air Quality Standards and Area Designations: carbon monoxide, nitrogen dioxide, sulfur dioxide, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Available: <https://www.arb.ca.gov/degis/degis.htm>. Accessed November 13, 2018.

U.S. Environmental Protection Agency. Green Book. 8-Hour Ozone (2015) Designated Area/State Information with Design Values. October 31, 2018. Accessed November 13, 2018.

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**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	12.00	1000sqft	0.28	12,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	66
<b>Climate Zone</b>	1			<b>Operational Year</b>	2022
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - Construction Run only.

Land Use -

Construction Phase - Anticipated construction duration is 14 months beginning in March 2021 and complete by May 2022

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - no saws would be used during grading plus hauling trucks would be used.

Off-road Equipment -

Trips and VMT - assumed 20 workers/day

Grading - approved grading plans indicate, 8000 cy of material would be excavated and removed

Vehicle Trips - construction run only

Energy Use - construction run only

Water And Wastewater - construction run only

Solid Waste - construction run only

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Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	6000	0
tblAreaCoating	Area_Nonresidential_Interior	18000	0
tblConstructionPhase	NumDays	5.00	30.00
tblConstructionPhase	NumDays	100.00	145.00
tblConstructionPhase	NumDays	2.00	45.00
tblConstructionPhase	NumDays	5.00	30.00
tblConstructionPhase	NumDays	1.00	45.00
tblEnergyUse	LightingElect	1.81	0.00
tblEnergyUse	NT24E	1.85	0.00
tblEnergyUse	NT24NG	0.31	0.00
tblEnergyUse	T24E	0.62	0.00
tblEnergyUse	T24NG	3.20	0.00
tblGrading	MaterialExported	0.00	14,000.00
tblGrading	MaterialExported	0.00	14,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblSolidWaste	SolidWasteGenerationRate	68.40	0.00
tblTripsAndVMT	WorkerTripNumber	5.00	40.00
tblTripsAndVMT	WorkerTripNumber	13.00	40.00
tblTripsAndVMT	WorkerTripNumber	5.00	40.00
tblTripsAndVMT	WorkerTripNumber	18.00	40.00
tblVehicleTrips	ST_TR	10.37	0.00
tblVehicleTrips	SU_TR	36.63	0.00
tblVehicleTrips	WD_TR	9.11	0.00
tblWater	IndoorWaterUseRate	375,466.90	0.00
tblWater	OutdoorWaterUseRate	587,268.74	0.00

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**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1492	1.5997	1.2001	3.3200e-003	0.0934	0.0485	0.1420	0.0278	0.0448	0.0726	0.0000	303.0209	303.0209	0.0475	0.0000	304.2082
2022	0.1705	0.2081	0.2907	4.5000e-004	8.9600e-003	0.0104	0.0194	2.3900e-003	9.7400e-003	0.0121	0.0000	38.9570	38.9570	9.0300e-003	0.0000	39.1827
<b>Maximum</b>	<b>0.1705</b>	<b>1.5997</b>	<b>1.2001</b>	<b>3.3200e-003</b>	<b>0.0934</b>	<b>0.0485</b>	<b>0.1420</b>	<b>0.0278</b>	<b>0.0448</b>	<b>0.0726</b>	<b>0.0000</b>	<b>303.0209</b>	<b>303.0209</b>	<b>0.0475</b>	<b>0.0000</b>	<b>304.2082</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1492	1.5997	1.2001	3.3200e-003	0.0934	0.0485	0.1420	0.0278	0.0448	0.0726	0.0000	303.0207	303.0207	0.0475	0.0000	304.2081
2022	0.1705	0.2081	0.2907	4.5000e-004	8.9600e-003	0.0104	0.0194	2.3900e-003	9.7400e-003	0.0121	0.0000	38.9570	38.9570	9.0300e-003	0.0000	39.1826
<b>Maximum</b>	<b>0.1705</b>	<b>1.5997</b>	<b>1.2001</b>	<b>3.3200e-003</b>	<b>0.0934</b>	<b>0.0485</b>	<b>0.1420</b>	<b>0.0278</b>	<b>0.0448</b>	<b>0.0726</b>	<b>0.0000</b>	<b>303.0207</b>	<b>303.0207</b>	<b>0.0475</b>	<b>0.0000</b>	<b>304.2081</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	0.6725	0.6725
2	6-1-2021	8-31-2021	0.6166	0.6166
3	9-1-2021	11-30-2021	0.3163	0.3163
4	12-1-2021	2-28-2022	0.2785	0.2785
5	3-1-2022	5-31-2022	0.2101	0.2101
		Highest	0.6725	0.6725

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0469	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0469</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0469	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0469</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/15/2021	5/14/2021	5	45	
2	Grading	Grading	5/15/2021	7/16/2021	5	45	
3	Building Construction	Building Construction	7/17/2021	2/4/2022	5	145	
4	Paving	Paving	2/5/2022	3/18/2022	5	30	
5	Architectural Coating	Architectural Coating	3/19/2022	4/29/2022	5	30	

**Acres of Grading (Site Preparation Phase): 22.5**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 18,000; Non-Residential Outdoor: 6,000; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Off-Highway Trucks	2	6.00	402	0.38
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	40.00	0.00	1,750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	40.00	0.00	1,750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	40.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

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**3.2 Site Preparation - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0127	0.0000	0.0127	1.4100e-003	0.0000	1.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1760	0.0906	2.2000e-004		6.7400e-003	6.7400e-003		6.2000e-003	6.2000e-003	0.0000	19.2397	19.2397	6.2200e-003	0.0000	19.3953
<b>Total</b>	<b>0.0144</b>	<b>0.1760</b>	<b>0.0906</b>	<b>2.2000e-004</b>	<b>0.0127</b>	<b>6.7400e-003</b>	<b>0.0195</b>	<b>1.4100e-003</b>	<b>6.2000e-003</b>	<b>7.6100e-003</b>	<b>0.0000</b>	<b>19.2397</b>	<b>19.2397</b>	<b>6.2200e-003</b>	<b>0.0000</b>	<b>19.3953</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.1400e-003	0.3131	0.0862	7.4000e-004	0.0145	1.3700e-003	0.0159	3.9800e-003	1.3100e-003	5.2900e-003	0.0000	69.7598	69.7598	1.4300e-003	0.0000	69.7955
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5200e-003	6.5900e-003	0.0614	7.0000e-005	7.1000e-003	8.0000e-005	7.1800e-003	1.8900e-003	7.0000e-005	1.9600e-003	0.0000	6.5681	6.5681	5.5000e-004	0.0000	6.5818
<b>Total</b>	<b>0.0177</b>	<b>0.3196</b>	<b>0.1476</b>	<b>8.1000e-004</b>	<b>0.0216</b>	<b>1.4500e-003</b>	<b>0.0231</b>	<b>5.8700e-003</b>	<b>1.3800e-003</b>	<b>7.2500e-003</b>	<b>0.0000</b>	<b>76.3278</b>	<b>76.3278</b>	<b>1.9800e-003</b>	<b>0.0000</b>	<b>76.3774</b>

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**3.2 Site Preparation - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0127	0.0000	0.0127	1.4100e-003	0.0000	1.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1760	0.0906	2.2000e-004		6.7400e-003	6.7400e-003		6.2000e-003	6.2000e-003	0.0000	19.2397	19.2397	6.2200e-003	0.0000	19.3952
<b>Total</b>	<b>0.0144</b>	<b>0.1760</b>	<b>0.0906</b>	<b>2.2000e-004</b>	<b>0.0127</b>	<b>6.7400e-003</b>	<b>0.0195</b>	<b>1.4100e-003</b>	<b>6.2000e-003</b>	<b>7.6100e-003</b>	<b>0.0000</b>	<b>19.2397</b>	<b>19.2397</b>	<b>6.2200e-003</b>	<b>0.0000</b>	<b>19.3952</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.1400e-003	0.3131	0.0862	7.4000e-004	0.0145	1.3700e-003	0.0159	3.9800e-003	1.3100e-003	5.2900e-003	0.0000	69.7598	69.7598	1.4300e-003	0.0000	69.7955
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5200e-003	6.5900e-003	0.0614	7.0000e-005	7.1000e-003	8.0000e-005	7.1800e-003	1.8900e-003	7.0000e-005	1.9600e-003	0.0000	6.5681	6.5681	5.5000e-004	0.0000	6.5818
<b>Total</b>	<b>0.0177</b>	<b>0.3196</b>	<b>0.1476</b>	<b>8.1000e-004</b>	<b>0.0216</b>	<b>1.4500e-003</b>	<b>0.0231</b>	<b>5.8700e-003</b>	<b>1.3800e-003</b>	<b>7.2500e-003</b>	<b>0.0000</b>	<b>76.3278</b>	<b>76.3278</b>	<b>1.9800e-003</b>	<b>0.0000</b>	<b>76.3774</b>

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**3.3 Grading - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0177	0.0000	0.0177	9.4300e-003	0.0000	9.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.2725	0.2093	5.7000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	50.4689	50.4689	0.0163	0.0000	50.8770
<b>Total</b>	<b>0.0297</b>	<b>0.2725</b>	<b>0.2093</b>	<b>5.7000e-004</b>	<b>0.0177</b>	<b>0.0118</b>	<b>0.0295</b>	<b>9.4300e-003</b>	<b>0.0108</b>	<b>0.0203</b>	<b>0.0000</b>	<b>50.4689</b>	<b>50.4689</b>	<b>0.0163</b>	<b>0.0000</b>	<b>50.8770</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.1400e-003	0.3131	0.0862	7.4000e-004	0.0145	1.3700e-003	0.0159	3.9800e-003	1.3100e-003	5.2900e-003	0.0000	69.7598	69.7598	1.4300e-003	0.0000	69.7955
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5200e-003	6.5900e-003	0.0614	7.0000e-005	7.1000e-003	8.0000e-005	7.1800e-003	1.8900e-003	7.0000e-005	1.9600e-003	0.0000	6.5681	6.5681	5.5000e-004	0.0000	6.5818
<b>Total</b>	<b>0.0177</b>	<b>0.3196</b>	<b>0.1476</b>	<b>8.1000e-004</b>	<b>0.0216</b>	<b>1.4500e-003</b>	<b>0.0231</b>	<b>5.8700e-003</b>	<b>1.3800e-003</b>	<b>7.2500e-003</b>	<b>0.0000</b>	<b>76.3278</b>	<b>76.3278</b>	<b>1.9800e-003</b>	<b>0.0000</b>	<b>76.3774</b>

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**3.3 Grading - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0177	0.0000	0.0177	9.4300e-003	0.0000	9.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.2725	0.2093	5.7000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	50.4689	50.4689	0.0163	0.0000	50.8769
<b>Total</b>	<b>0.0297</b>	<b>0.2725</b>	<b>0.2093</b>	<b>5.7000e-004</b>	<b>0.0177</b>	<b>0.0118</b>	<b>0.0295</b>	<b>9.4300e-003</b>	<b>0.0108</b>	<b>0.0203</b>	<b>0.0000</b>	<b>50.4689</b>	<b>50.4689</b>	<b>0.0163</b>	<b>0.0000</b>	<b>50.8769</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.1400e-003	0.3131	0.0862	7.4000e-004	0.0145	1.3700e-003	0.0159	3.9800e-003	1.3100e-003	5.2900e-003	0.0000	69.7598	69.7598	1.4300e-003	0.0000	69.7955
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5200e-003	6.5900e-003	0.0614	7.0000e-005	7.1000e-003	8.0000e-005	7.1800e-003	1.8900e-003	7.0000e-005	1.9600e-003	0.0000	6.5681	6.5681	5.5000e-004	0.0000	6.5818
<b>Total</b>	<b>0.0177</b>	<b>0.3196</b>	<b>0.1476</b>	<b>8.1000e-004</b>	<b>0.0216</b>	<b>1.4500e-003</b>	<b>0.0231</b>	<b>5.8700e-003</b>	<b>1.3800e-003</b>	<b>7.2500e-003</b>	<b>0.0000</b>	<b>76.3278</b>	<b>76.3278</b>	<b>1.9800e-003</b>	<b>0.0000</b>	<b>76.3774</b>

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**3.4 Building Construction - 2021**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4791	0.4358	6.8000e-004		0.0269	0.0269		0.0247	0.0247	0.0000	60.0492	60.0492	0.0194	0.0000	60.5348
<b>Total</b>	<b>0.0465</b>	<b>0.4791</b>	<b>0.4358</b>	<b>6.8000e-004</b>		<b>0.0269</b>	<b>0.0269</b>		<b>0.0247</b>	<b>0.0247</b>	<b>0.0000</b>	<b>60.0492</b>	<b>60.0492</b>	<b>0.0194</b>	<b>0.0000</b>	<b>60.5348</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0153	5.4400e-003	3.0000e-005	7.8000e-004	5.0000e-005	8.3000e-004	2.3000e-004	5.0000e-005	2.8000e-004	0.0000	3.0926	3.0926	1.0000e-004	0.0000	3.0949
Worker	0.0227	0.0176	0.1637	2.0000e-004	0.0189	2.1000e-004	0.0192	5.0400e-003	2.0000e-004	5.2400e-003	0.0000	17.5148	17.5148	1.4700e-003	0.0000	17.5516
<b>Total</b>	<b>0.0233</b>	<b>0.0329</b>	<b>0.1692</b>	<b>2.3000e-004</b>	<b>0.0197</b>	<b>2.6000e-004</b>	<b>0.0200</b>	<b>5.2700e-003</b>	<b>2.5000e-004</b>	<b>5.5200e-003</b>	<b>0.0000</b>	<b>20.6074</b>	<b>20.6074</b>	<b>1.5700e-003</b>	<b>0.0000</b>	<b>20.6465</b>

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**3.4 Building Construction - 2021**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0465	0.4791	0.4358	6.8000e-004		0.0269	0.0269		0.0247	0.0247	0.0000	60.0492	60.0492	0.0194	0.0000	60.5347
<b>Total</b>	<b>0.0465</b>	<b>0.4791</b>	<b>0.4358</b>	<b>6.8000e-004</b>		<b>0.0269</b>	<b>0.0269</b>		<b>0.0247</b>	<b>0.0247</b>	<b>0.0000</b>	<b>60.0492</b>	<b>60.0492</b>	<b>0.0194</b>	<b>0.0000</b>	<b>60.5347</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9000e-004	0.0153	5.4400e-003	3.0000e-005	7.8000e-004	5.0000e-005	8.3000e-004	2.3000e-004	5.0000e-005	2.8000e-004	0.0000	3.0926	3.0926	1.0000e-004	0.0000	3.0949
Worker	0.0227	0.0176	0.1637	2.0000e-004	0.0189	2.1000e-004	0.0192	5.0400e-003	2.0000e-004	5.2400e-003	0.0000	17.5148	17.5148	1.4700e-003	0.0000	17.5516
<b>Total</b>	<b>0.0233</b>	<b>0.0329</b>	<b>0.1692</b>	<b>2.3000e-004</b>	<b>0.0197</b>	<b>2.6000e-004</b>	<b>0.0200</b>	<b>5.2700e-003</b>	<b>2.5000e-004</b>	<b>5.5200e-003</b>	<b>0.0000</b>	<b>20.6074</b>	<b>20.6074</b>	<b>1.5700e-003</b>	<b>0.0000</b>	<b>20.6465</b>

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**3.4 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5800e-003	0.0878	0.0894	1.4000e-004		4.6500e-003	4.6500e-003		4.2800e-003	4.2800e-003	0.0000	12.5185	12.5185	4.0500e-003	0.0000	12.6197
<b>Total</b>	<b>8.5800e-003</b>	<b>0.0878</b>	<b>0.0894</b>	<b>1.4000e-004</b>		<b>4.6500e-003</b>	<b>4.6500e-003</b>		<b>4.2800e-003</b>	<b>4.2800e-003</b>	<b>0.0000</b>	<b>12.5185</b>	<b>12.5185</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>12.6197</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.0500e-003	1.0200e-003	1.0000e-005	1.6000e-004	1.0000e-005	1.7000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6411	0.6411	2.0000e-005	0.0000	0.6416
Worker	4.4600e-003	3.3000e-003	0.0303	4.0000e-005	3.9500e-003	4.0000e-005	3.9900e-003	1.0500e-003	4.0000e-005	1.0900e-003	0.0000	3.5302	3.5302	2.7000e-004	0.0000	3.5369
<b>Total</b>	<b>4.5700e-003</b>	<b>6.3500e-003</b>	<b>0.0313</b>	<b>5.0000e-005</b>	<b>4.1100e-003</b>	<b>5.0000e-005</b>	<b>4.1600e-003</b>	<b>1.1000e-003</b>	<b>5.0000e-005</b>	<b>1.1500e-003</b>	<b>0.0000</b>	<b>4.1713</b>	<b>4.1713</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>4.1785</b>

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**3.4 Building Construction - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.5800e-003	0.0878	0.0894	1.4000e-004		4.6500e-003	4.6500e-003		4.2800e-003	4.2800e-003	0.0000	12.5185	12.5185	4.0500e-003	0.0000	12.6197
<b>Total</b>	<b>8.5800e-003</b>	<b>0.0878</b>	<b>0.0894</b>	<b>1.4000e-004</b>		<b>4.6500e-003</b>	<b>4.6500e-003</b>		<b>4.2800e-003</b>	<b>4.2800e-003</b>	<b>0.0000</b>	<b>12.5185</b>	<b>12.5185</b>	<b>4.0500e-003</b>	<b>0.0000</b>	<b>12.6197</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.0500e-003	1.0200e-003	1.0000e-005	1.6000e-004	1.0000e-005	1.7000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6411	0.6411	2.0000e-005	0.0000	0.6416
Worker	4.4600e-003	3.3000e-003	0.0303	4.0000e-005	3.9500e-003	4.0000e-005	3.9900e-003	1.0500e-003	4.0000e-005	1.0900e-003	0.0000	3.5302	3.5302	2.7000e-004	0.0000	3.5369
<b>Total</b>	<b>4.5700e-003</b>	<b>6.3500e-003</b>	<b>0.0313</b>	<b>5.0000e-005</b>	<b>4.1100e-003</b>	<b>5.0000e-005</b>	<b>4.1600e-003</b>	<b>1.1000e-003</b>	<b>5.0000e-005</b>	<b>1.1500e-003</b>	<b>0.0000</b>	<b>4.1713</b>	<b>4.1713</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>4.1785</b>

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**3.5 Paving - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.7000e-003	0.0888	0.1055	1.7000e-004		4.4400e-003	4.4400e-003		4.1400e-003	4.1400e-003	0.0000	14.0953	14.0953	4.1100e-003	0.0000	14.1979
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>9.7000e-003</b>	<b>0.0888</b>	<b>0.1055</b>	<b>1.7000e-004</b>		<b>4.4400e-003</b>	<b>4.4400e-003</b>		<b>4.1400e-003</b>	<b>4.1400e-003</b>	<b>0.0000</b>	<b>14.0953</b>	<b>14.0953</b>	<b>4.1100e-003</b>	<b>0.0000</b>	<b>14.1979</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3500e-003	3.9700e-003	0.0364	5.0000e-005	4.7400e-003	5.0000e-005	4.7900e-003	1.2600e-003	5.0000e-005	1.3100e-003	0.0000	4.2362	4.2362	3.3000e-004	0.0000	4.2443
<b>Total</b>	<b>5.3500e-003</b>	<b>3.9700e-003</b>	<b>0.0364</b>	<b>5.0000e-005</b>	<b>4.7400e-003</b>	<b>5.0000e-005</b>	<b>4.7900e-003</b>	<b>1.2600e-003</b>	<b>5.0000e-005</b>	<b>1.3100e-003</b>	<b>0.0000</b>	<b>4.2362</b>	<b>4.2362</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>4.2443</b>

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**3.5 Paving - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.7000e-003	0.0888	0.1055	1.7000e-004		4.4400e-003	4.4400e-003		4.1400e-003	4.1400e-003	0.0000	14.0953	14.0953	4.1100e-003	0.0000	14.1979
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>9.7000e-003</b>	<b>0.0888</b>	<b>0.1055</b>	<b>1.7000e-004</b>		<b>4.4400e-003</b>	<b>4.4400e-003</b>		<b>4.1400e-003</b>	<b>4.1400e-003</b>	<b>0.0000</b>	<b>14.0953</b>	<b>14.0953</b>	<b>4.1100e-003</b>	<b>0.0000</b>	<b>14.1979</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3500e-003	3.9700e-003	0.0364	5.0000e-005	4.7400e-003	5.0000e-005	4.7900e-003	1.2600e-003	5.0000e-005	1.3100e-003	0.0000	4.2362	4.2362	3.3000e-004	0.0000	4.2443
<b>Total</b>	<b>5.3500e-003</b>	<b>3.9700e-003</b>	<b>0.0364</b>	<b>5.0000e-005</b>	<b>4.7400e-003</b>	<b>5.0000e-005</b>	<b>4.7900e-003</b>	<b>1.2600e-003</b>	<b>5.0000e-005</b>	<b>1.3100e-003</b>	<b>0.0000</b>	<b>4.2362</b>	<b>4.2362</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>4.2443</b>

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**3.6 Architectural Coating - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1391					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0700e-003	0.0211	0.0272	4.0000e-005		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	3.8299	3.8299	2.5000e-004	0.0000	3.8361
<b>Total</b>	<b>0.1421</b>	<b>0.0211</b>	<b>0.0272</b>	<b>4.0000e-005</b>		<b>1.2300e-003</b>	<b>1.2300e-003</b>		<b>1.2300e-003</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>3.8299</b>	<b>3.8299</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>3.8361</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.0000e-004	9.1000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1059	0.1059	1.0000e-005	0.0000	0.1061
<b>Total</b>	<b>1.3000e-004</b>	<b>1.0000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1059</b>	<b>0.1059</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1061</b>

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**3.6 Architectural Coating - 2022**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1391					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0700e-003	0.0211	0.0272	4.0000e-005		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003	0.0000	3.8299	3.8299	2.5000e-004	0.0000	3.8361
<b>Total</b>	<b>0.1421</b>	<b>0.0211</b>	<b>0.0272</b>	<b>4.0000e-005</b>		<b>1.2300e-003</b>	<b>1.2300e-003</b>		<b>1.2300e-003</b>	<b>1.2300e-003</b>	<b>0.0000</b>	<b>3.8299</b>	<b>3.8299</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>3.8361</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	1.0000e-004	9.1000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1059	0.1059	1.0000e-005	0.0000	0.1061
<b>Total</b>	<b>1.3000e-004</b>	<b>1.0000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>1.2000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1059</b>	<b>0.1059</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1061</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Place of Worship	9.50	7.30	7.30	0.00	95.00	5.00	64	25	11

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	0.483457	0.047842	0.208016	0.157307	0.049674	0.007506	0.019049	0.011796	0.003290	0.001259	0.006861	0.001784	0.002160

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**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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



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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0469	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Unmitigated	0.0469	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
<b>Total</b>	<b>0.0469</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
<b>Total</b>	<b>0.0469</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Place of Worship	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

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

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Place of Worship	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Tuolumne County Resilience Center\_Operational Run  
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**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Place of Worship	12.00	1000sqft	0.28	12,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	66
<b>Climate Zone</b>	1			<b>Operational Year</b>	2022
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics -

Land Use -

Off-road Equipment - this run is for operations only

Off-road Equipment - this run is for operations only

Off-road Equipment - this run is for operations only

Off-road Equipment - this run is for operations only

Off-road Equipment - this run is for operations only

Off-road Equipment - this run is for operations only

Grading - this run is for operations only

Architectural Coating - this run is for operations only

Vehicle Trips - adjusted per VMT/trip rate provided by Wood Rodgers

Energy Mitigation -

Energy Use - Title 24-regulated energy reduced by 30% to adjust from 2016 to 2019 title 24

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	6,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	18,000.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	0.00
tblEnergyUse	T24E	0.62	0.43
tblEnergyUse	T24NG	3.20	2.24
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblVehicleTrips	CC_TL	7.30	10.33
tblVehicleTrips	CC_TTP	95.00	100.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	DV_TP	25.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	64.00	100.00
tblVehicleTrips	ST_TR	10.37	28.82
tblVehicleTrips	SU_TR	36.63	28.82
tblVehicleTrips	WD_TR	9.11	28.82

## 2.0 Emissions Summary

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Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2018	1-31-2019	0.0119	0.0119
2	2-1-2019	4-30-2019	0.0104	0.0104
		Highest	0.0119	0.0119

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0608	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Energy	1.7000e-004	1.5000e-003	1.2600e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	15.9109	15.9109	6.8000e-004	1.6000e-004	15.9765
Mobile	0.2481	0.9306	3.1323	5.9600e-003	0.4850	7.6600e-003	0.4927	0.1305	7.1900e-003	0.1377	0.0000	540.9195	540.9195	0.0329	0.0000	541.7420
Waste						0.0000	0.0000		0.0000	0.0000	13.8846	0.0000	13.8846	0.8206	0.0000	34.3985
Water						0.0000	0.0000		0.0000	0.0000	0.1191	1.1890	1.3081	0.0123	3.0000e-004	1.7047
<b>Total</b>	<b>0.3091</b>	<b>0.9321</b>	<b>3.1336</b>	<b>5.9700e-003</b>	<b>0.4850</b>	<b>7.7700e-003</b>	<b>0.4928</b>	<b>0.1305</b>	<b>7.3000e-003</b>	<b>0.1378</b>	<b>14.0037</b>	<b>558.0195</b>	<b>572.0232</b>	<b>0.8664</b>	<b>4.6000e-004</b>	<b>593.8219</b>

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0608	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Energy	1.7000e-004	1.5000e-003	1.2600e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	15.9109	15.9109	6.8000e-004	1.6000e-004	15.9765
Mobile	0.2481	0.9306	3.1323	5.9600e-003	0.4850	7.6600e-003	0.4927	0.1305	7.1900e-003	0.1377	0.0000	540.9195	540.9195	0.0329	0.0000	541.7420
Waste						0.0000	0.0000		0.0000	0.0000	13.8846	0.0000	13.8846	0.8206	0.0000	34.3985
Water						0.0000	0.0000		0.0000	0.0000	0.1191	1.1890	1.3081	0.0123	3.0000e-004	1.7047
<b>Total</b>	<b>0.3091</b>	<b>0.9321</b>	<b>3.1336</b>	<b>5.9700e-003</b>	<b>0.4850</b>	<b>7.7700e-003</b>	<b>0.4928</b>	<b>0.1305</b>	<b>7.3000e-003</b>	<b>0.1378</b>	<b>14.0037</b>	<b>558.0195</b>	<b>572.0232</b>	<b>0.8664</b>	<b>4.6000e-004</b>	<b>593.8219</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2018	11/14/2018	5	10	
2	Site Preparation	Site Preparation	11/15/2018	11/15/2018	5	1	
3	Grading	Grading	11/16/2018	11/19/2018	5	2	
4	Building Construction	Building Construction	11/20/2018	4/8/2019	5	100	
5	Paving	Paving	4/9/2019	4/15/2019	5	5	
6	Architectural Coating	Architectural Coating	4/16/2019	4/22/2019	5	5	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

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

**OffRoad Equipment**

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Site Preparation	Graders	0	8.00	187	0.41
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	5.00	2.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	1.00	0.00		10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT





























Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**3.7 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.1000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0194	0.0194	0.0000	0.0000	0.0194
<b>Total</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0194</b>	<b>0.0194</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0194</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2481	0.9306	3.1323	5.9600e-003	0.4850	7.6600e-003	0.4927	0.1305	7.1900e-003	0.1377	0.0000	540.9195	540.9195	0.0329	0.0000	541.7420
Unmitigated	0.2481	0.9306	3.1323	5.9600e-003	0.4850	7.6600e-003	0.4927	0.1305	7.1900e-003	0.1377	0.0000	540.9195	540.9195	0.0329	0.0000	541.7420

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Place of Worship	345.84	345.84	345.84	1,300,903	1,300,903
Total	345.84	345.84	345.84	1,300,903	1,300,903

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Place of Worship	0.00	10.33	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Place of Worship	0.483457	0.047842	0.208016	0.157307	0.049674	0.007506	0.019049	0.011796	0.003290	0.001259	0.006861	0.001784	0.002160

5.0 Energy Detail

Historical Energy Use: N

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.2779	14.2779	6.5000e-004	1.3000e-004	14.3339
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.2779	14.2779	6.5000e-004	1.3000e-004	14.3339
NaturalGas Mitigated	1.7000e-004	1.5000e-003	1.2600e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6329	1.6329	3.0000e-005	3.0000e-005	1.6426
NaturalGas Unmitigated	1.7000e-004	1.5000e-003	1.2600e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6329	1.6329	3.0000e-005	3.0000e-005	1.6426

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Place of Worship	30600	1.7000e-004	1.5000e-003	1.2600e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6329	1.6329	3.0000e-005	3.0000e-005	1.6426
<b>Total</b>		<b>1.7000e-004</b>	<b>1.5000e-003</b>	<b>1.2600e-003</b>	<b>1.0000e-005</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.6329</b>	<b>1.6329</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>1.6426</b>

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**5.2 Energy by Land Use - Natural Gas**

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Place of Worship	30600	1.7000e-004	1.5000e-003	1.2600e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	1.6329	1.6329	3.0000e-005	3.0000e-005	1.6426
<b>Total</b>		<b>1.7000e-004</b>	<b>1.5000e-003</b>	<b>1.2600e-003</b>	<b>1.0000e-005</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>		<b>1.1000e-004</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>1.6329</b>	<b>1.6329</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>1.6426</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Place of Worship	49080	14.2779	6.5000e-004	1.3000e-004	14.3339
<b>Total</b>		<b>14.2779</b>	<b>6.5000e-004</b>	<b>1.3000e-004</b>	<b>14.3339</b>

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Place of Worship	49080	14.2779	6.5000e-004	1.3000e-004	14.3339
<b>Total</b>		<b>14.2779</b>	<b>6.5000e-004</b>	<b>1.3000e-004</b>	<b>14.3339</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0608	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Unmitigated	0.0608	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
<b>Total</b>	<b>0.0608</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
<b>Total</b>	<b>0.0608</b>	<b>0.0000</b>	<b>1.1000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.1000e-004</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.3000e-004</b>

**7.0 Water Detail**

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.3081	0.0123	3.0000e-004	1.7047
Unmitigated	1.3081	0.0123	3.0000e-004	1.7047

### 7.2 Water by Land Use

#### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Place of Worship	0.375467 / 0.587269	1.3081	0.0123	3.0000e-004	1.7047
<b>Total</b>		<b>1.3081</b>	<b>0.0123</b>	<b>3.0000e-004</b>	<b>1.7047</b>

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Place of Worship	0.375467 / 0.587269	1.3081	0.0123	3.0000e-004	1.7047
<b>Total</b>		<b>1.3081</b>	<b>0.0123</b>	<b>3.0000e-004</b>	<b>1.7047</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.8846	0.8206	0.0000	34.3985
Unmitigated	13.8846	0.8206	0.0000	34.3985

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Place of Worship	68.4	13.8846	0.8206	0.0000	34.3985
<b>Total</b>		<b>13.8846</b>	<b>0.8206</b>	<b>0.0000</b>	<b>34.3985</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Place of Worship	68.4	13.8846	0.8206	0.0000	34.3985
<b>Total</b>		<b>13.8846</b>	<b>0.8206</b>	<b>0.0000</b>	<b>34.3985</b>

**9.0 Operational Offroad**

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

Tuolumne County Resilience Center\_Operational Run - Tuolumne County, Annual

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Enclosure 1**

**Staff Report**

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California Air Resources Board  
Air Quality Planning and Science Division  
Air Quality Analysis Section

**RECOMMENDED AREA DESIGNATIONS FOR THE  
0.070 PPM FEDERAL 8-HOUR OZONE STANDARD**

**STAFF REPORT**

**September 2016**

California Environmental Protection Agency

 **Air Resources Board**

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## 1.0 Introduction

### 1.1 Summary

On October 1, 2015, the U.S. Environmental Protection Agency (U.S. EPA) revised the federal 8-hour average ozone standard, lowering it from 0.075 parts per million (ppm) to 0.070 ppm (Federal Register 26594, October 26, 2015). By October 1, 2016, all states are required to submit to U.S. EPA recommendations for area designations, together with appropriate boundaries, for this standard. The purpose of this report is to share Air Resources Board (ARB) staff's technical analysis and initial recommendations to be sent to U.S. EPA. U.S. EPA is required to make final designations by October 1, 2017.

Section 107(d)(1)(A) of the federal Clean Air Act defines a nonattainment area as any area that does not meet, or that contributes to a nearby area not meeting, the ambient air quality standard. Additionally, any area not identified as nonattainment and that meets the standard will be designated attainment, while any area that cannot be designated on the basis of available information as meeting or not meeting the standard will be designated unclassifiable.

ARB staff has performed analysis to determine appropriate designation recommendations throughout the State using the criteria outlined in the U.S. EPA's guidance memorandum<sup>1</sup>. Based on ozone air quality monitoring data from the years 2013-2015, there are 19 areas that do not meet the 0.070 ppm standard. Sixteen of these areas are currently designated nonattainment for the 2008 federal 8-hour ozone standard of 0.075 ppm. The three remaining areas were attainment for the federal 8-hour ozone standard of 0.075 ppm, but were nonattainment for the previous 1997 federal 8-hour standard of 0.08 ppm. Staff is recommending that the boundaries for the 16 existing nonattainment areas remain the same as the boundaries for the 0.075 ppm standard. Similarly, the boundaries for the remaining three areas are consistent with the areas designated as nonattainment for the 0.08 ppm standard.

Additionally, the federal Clean Air Act allows for the designation of a Rural Transport Area if certain conditions based on emissions, population, and location exist for a nonattainment area. After evaluating each of the recommended nonattainment areas, ARB staff determined that only one area, the Tuscan Buttes nonattainment area, meets all of the criteria for a Rural Transport Area.

### 1.2 Air Quality Analysis

ARB maintains one of the most comprehensive ozone monitoring networks in the world. Initial recommendations from ARB staff are based on ambient ozone concentrations measured during the years 2013, 2014, and 2015 by over 170 monitors located throughout the State that have been sited and operated in accordance with federal requirements. Designation status will be updated with 2016 ozone data when U.S. EPA promulgates final designations in 2017.

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<sup>1</sup> February 25, 2016, Area Designations for the 2015 Ozone National Ambient Air Quality Standards, Memorandum from Janet G. McCabe, Acting Assistant Administrator, Office of Air and Radiation to Regional Administrators, Regions 1-10.

One of the first steps to determining of attainment/nonattainment is to compare the ozone design value to the level of the standard. The design value reflects a three-year average of the fourth highest 8-hour average concentration at each monitoring site. If the design value is 0.071 ppm or greater, it violates the federal standard. These three-year average design values are updated once the monitoring data from each calendar year are reviewed and certified.

Ozone design values used by ARB staff in this analysis are based on a modified calculation procedure specified by U.S. EPA as part of the 0.070 ppm ozone standard. For the prior ozone standards, the daily maximum 8-hour average for each site is determined from all 24 of the rolling 8-hour averages calculated for each day, with 18 out of the 24 averages needed for data completeness. However, for the 0.070 ppm standard, the 8-hour averages calculated for hours 00 through 06 are no longer considered and the daily maximum is determined from the 8-hour averages for hours 07 through 23, with 13 out of the 17 averages needed for data completeness. The change in calculation method was made to eliminate the occurrence of multiple exceedances of the ozone standard in the middle of the night due to overlapping 8-hour periods on two consecutive days. The new method treats this situation as one exceedance of the ozone standard, rather than two exceedances. A reduction in the number of exceedance days has the potential to lower design values. Applying the new method to data for 2013-2015, a few design values decreased, but the changes do not impact the attainment/nonattainment status for any monitoring sites in California.

U.S. EPA's guidance memorandum also states that air quality monitoring data affected by exceptional events may be excluded from use in identifying a violation if certain criteria are met. The 2015 design values in this document do not reflect the exclusion of impacts from exceptional events, as ARB staff is not aware of any events that would have affected attainment status. If ARB becomes aware of any exceptional events before final designations are promulgated, ARB will work with U.S. EPA and the air districts with jurisdiction over the exceptional event area to submit all necessary documentation.

### 1.3 Nonattainment Area Boundary Analysis

Ozone is not a directly emitted pollutant, but is formed in the atmosphere via photochemical reactions driven by sunlight. Because it takes time for these reactions to occur, high ozone concentrations are often found at downwind locations, sometimes far away from the initial ozone precursor emissions sources. Thus, the ozone problem is often regional in nature and encompasses many different areas, including highly populated urban areas to sparsely-populated, rural downwind areas impacted by transport.

In California, for regional pollutants, the primary considerations for air quality planning are the air basin and air district boundaries. Consistent with State law, California's air basin boundaries were established based on a scientific assessment of emissions, geography, and meteorology with a consideration of political jurisdictions. Basin boundaries are formally adopted by ARB in regulation. Local air districts have been established and their jurisdictions are defined in State law. ARB typically uses a

combination of air basin and air district boundaries to identify boundaries for areas that violate standards. However, California has several unique areas that are located far downwind of urban areas, in which cases boundaries smaller than air basin or District boundaries are warranted.

The U.S. EPA designations guidance memorandum prescribes that a five factor analysis be performed to determine nonattainment area boundaries, which includes evaluating:

1. Air Quality Data
2. Emissions and Emissions-Related Data
3. Meteorology
4. Geography/Topography
5. Jurisdictional Boundaries

The first factor, Air Quality Data, involves the evaluation of ambient ozone air quality data collected by the monitors throughout the State and was briefly discussed in Section 1.2 above. In addition to the design value for each monitoring site, assessing the spatial variation in concentrations and the trends over recent years is helpful for determining nonattainment area boundaries.

The second factor, Emissions and Emission-Related Data, involves the analysis of stationary emission sources and locations, mobile sources and traffic patterns, and population within a region. Assessing the location and magnitude of emissions in neighboring regions is also essential for determining the potential impact of transport. Statewide and county-level emissions inventories prepared by ARB and U.S. EPA and model forecasts prepared by ARB support this analysis.

The third factor, Meteorology, involves the review of climatology, including wind flow patterns, diurnal and seasonal temperature variations, and large-scale weather patterns; assessing the impact of weather on pollutant levels within a region; and determining the types of large-scale and small-scale weather features that lead to pollutant transport between regions.

The fourth factor, Geography/Topography, involves the evaluation of the diverse terrain throughout the State and the potential impact on local weather patterns and the buildup and transport of pollutants. The mountains and valleys throughout California, combined with population centers, emissions source locations, and meteorology, were the primary factor in defining distinct air basins throughout the State. Understanding the terrain within California and its impact on ozone air quality is essential to determining nonattainment area boundaries.

The fifth factor, Jurisdictional Boundaries, involves the evaluation of existing boundaries such as counties, air districts, and metropolitan planning organizations within California when determining nonattainment boundaries. Considering existing jurisdictional features provides clear legal boundaries to reference, and incorporating the boundaries assists the State and local air quality agencies in air quality planning and enforcement activities.

The five factors have been analyzed for all areas of the State and a summary of ARB's recommendations are discussed below. The ozone nonattainment boundaries already in existence for the 2008 federal 8-hour ozone standard of 0.075 ppm are the result of extensive technical analysis and continue to appropriately reflect conditions under the revised ozone standard of 0.070 ppm.

#### 1.4 Designation Recommendations

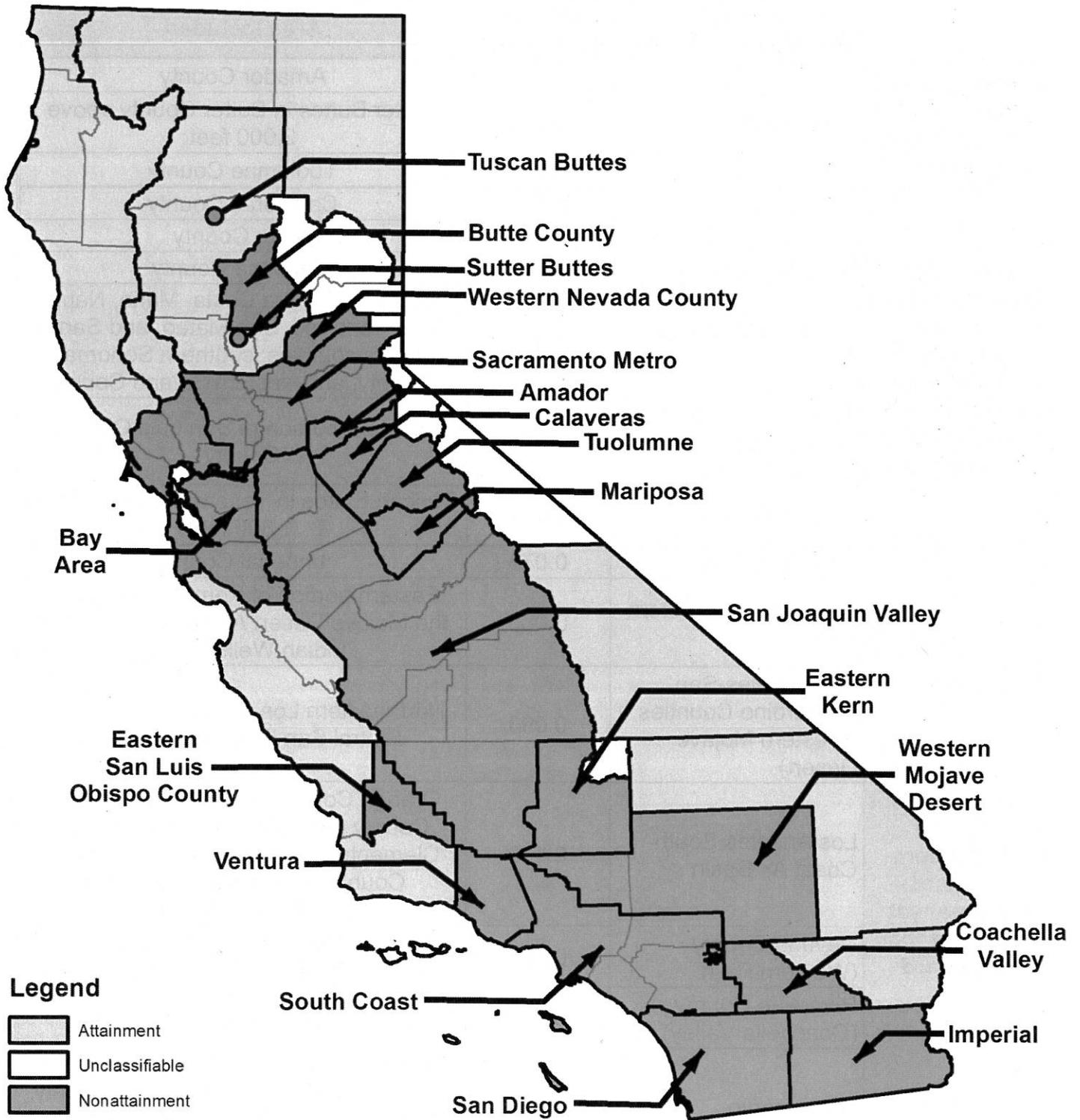
After consideration of the five factors outlined in U.S. EPA guidance memorandum, ARB staff recommends that 19 areas in California be designated as nonattainment for the 0.070 ppm federal ozone standard. The 16 areas that are designated as nonattainment for the 0.075 ppm ozone standard would continue to be designated as nonattainment for the new standard. In addition, there are three areas that were attainment for the 0.075 ppm federal 8-hour ozone standard that violate the new standard and would also be designated nonattainment. These same three areas had previously been nonattainment for the 0.08 ppm federal 8-hour ozone standard before receiving attainment designations for the 0.075 ppm standard.

Figure 1 shows all of the areas in California that ARB is recommending for designations of Attainment, Nonattainment, and Unclassifiable. Table 1, also below, contains a listing of all the recommended nonattainment areas, the current design values based on 2013-2015 ozone data, and the geographic area covered by each nonattainment area.

#### 1.5 Ozone Classifications

Classifications are assigned to all ozone nonattainment areas by the U.S. EPA when designations are finalized. Classifications are based on the severity of the ozone problem and trigger associated regulatory and control requirements. U.S. EPA has stated that they will release a draft implementation rule and associated guidance later this year. This draft rule, which will be available for public comment, will also include a proposed classification scheme for determining which nonattainment areas are Marginal, Moderate, Serious, Severe-15, Severe-17, or Extreme. U.S. EPA intends to finalize the draft rule prior to when, or at the same time, designations are made final. Because U.S. EPA has not released the draft implementation rule and classification scheme, no information is available at this time to enable ARB to provide information on classifications for the 0.070 ppm ozone standard.

**Figure 1**  
**Recommended Area Designations for the 0.070 ppm Federal**  
**8-Hour Ozone Standard**



**Table 1**

**Recommended California Nonattainment Areas for the 0.070 ppm Federal 8-Hour Ozone Standard (Based on 2013-2015 Ozone Air Quality Data)**

	<b>Recommended Nonattainment Area</b>	<b>Design Value (ppm)</b>	<b>Area Included</b>
<b>Designated attainment for the 0.075 ppm standard</b>	Amador County	0.071	Amador County
	Sutter Buttes	0.072	Sutter Buttes in Sutter County above 2,000 feet
	Tuolumne County	0.073	Tuolumne County
<b>Designated nonattainment for the 0.075 ppm standard – and now meeting that standard</b>	Calaveras County	0.073	Calaveras County
	Chico (Butte County)	0.074	Butte County
	Mariposa County	0.075	Mariposa County
	San Francisco Bay Area	0.073	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties; southern Sonoma County; and western Solano County
	San Luis Obispo (Eastern San Luis Obispo County)	0.073	Eastern portion of San Luis Obispo County
	Tuscan Buttes	0.074	Tuscan Buttes in Tehama County above 1,800 feet
<b>Designated nonattainment for the 0.075 ppm standard – and not yet meeting that standard</b>	Imperial County	0.078	Imperial County
	Kern County (Eastern Kern)	0.083	Eastern portion of Kern County within the Mojave Desert Air Basin (excluding Indian Wells Valley)
	Los Angeles-San Bernardino Counties (Western Mojave Desert)	0.090	Northeastern Los Angeles County and central San Bernardino County
	Los Angeles-South Coast Air Basin	0.102	Orange County; western Los Angeles County (including Catalina and San Clemente Islands); western Riverside County; and southwestern San Bernardino County
	Nevada County (Western Part)	0.081	Portion of Nevada County west of the crest of the Sierra Nevada Mountains
	Riverside County (Coachella Valley)	0.088	Central Riverside County
	Sacramento Metropolitan Area	0.081	Sacramento and Yolo counties; eastern Solano County; southern Sutter County; and portions of Placer and El Dorado counties west of the crest of the Sierra Nevada Mountains

	<b>Recommended Nonattainment Area</b>	<b>Design Value (ppm)</b>	<b>Area Included</b>
	San Diego County	0.079	San Diego County
	San Joaquin Valley	0.093	Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties and western portion of Kern County within the San Joaquin Valley Air Basin
	Ventura County	0.077	Continental portion of Ventura County (excludes Anacapa and San Nicholas islands)

## 2.0 Recommended Nonattainment Areas

### 2.1 Amador County

Amador County is a small county in the western foothills of the Sierra Nevada Mountains that has limited population and is largely mountainous and forested. The County extends from the Central Valley floor in the west to the crest of the Sierra Nevada Mountains in the east and only has a few cities with more than 1,000 people and a limited number of small highways that inhibit vehicle miles travelled.

Amador County is bordered by the Sacramento Metropolitan nonattainment area to the north and west, the San Joaquin Valley nonattainment area to the southwest, and the Calaveras County nonattainment area to the south. Amador County was part of the Central Mountain Counties nonattainment area for the 1997 federal 8-hour ozone standard of 0.08 ppm, which also included Calaveras County. As a result of ongoing air quality improvement, by the time U.S. EPA finalized designations for the 2008 ozone standard of 0.075 ppm, Amador County met the more health-protective standard and was designated attainment. As a result, U.S. EPA eliminated the Central Mountain Counties nonattainment area and Calaveras County became its own nonattainment area.

Amador County's single ozone monitor is situated in Jackson, the second largest city in the county with approximately 4,500 people. At an elevation of about 1,250 feet and roughly in the middle of the county, this location enables the monitor to capture peak ozone concentrations from wind flows out of the north, west, and south and adequately represents air quality in a centralized and populated area of the county.

The design value for the county of 0.071 ppm is just above the new federal ozone standard. With ozone concentrations in the region trending lower over time, Amador County is expected to come into attainment within the next few years. In addition, because Amador County and Calaveras County have population centers that are fairly isolated from one another, do not have significant emissions sources that impact ozone concentrations in the neighboring county, and operate and manage separate air quality programs, ARB is recommending that Amador County be designated as a separate nonattainment area from the Calaveras County nonattainment area.

### 2.2 Calaveras County

The Calaveras County nonattainment area will continue to include all of Calaveras County. The design value for Calaveras County is 0.073 ppm at the San Andreas-Gold Strike Road monitoring site.

### 2.3 Chico (Butte County)

The Chico (Butte County) nonattainment area would continue to comprise all of Butte County. There are two monitoring sites in Butte County, Chico-East Avenue and Paradise-4405 Airport Road. With a design value of 0.074 ppm, only the Paradise site in the eastern foothills portion of the county has a design value that violates the new ozone standard.

#### 2.4 Imperial County

The Imperial County nonattainment area would continue to include the entire county. The design value for Imperial County is 0.078 ppm at the El Centro-9th Street monitor.

#### 2.5 Kern County (Eastern Kern)

The Kern County (Eastern Kern) nonattainment area would continue to encompass almost all of Kern County within the Mojave Desert Air Basin and which falls under the jurisdiction of the Eastern Kern Air Pollution Control District. The nonattainment area would continue to exclude the Indian Wells Valley (defined as the Kern County portion of hydrologic unit 18090205), which is located in the northeastern portion of Kern County.

The Indian Wells Valley includes the town of Ridgecrest, which is located about 18 miles southwest of the Trona-Athol and Telegraph ozone monitor. The 2015 design value for the Trona monitor is 0.067 ppm and is considered more reflective of ozone concentrations in the Indian Wells Valley than the Mojave-923 Poole Street ozone monitor, located about 48 miles to the southwest of Ridgecrest.

The design value for the nonattainment area is 0.083 ppm at the Mojave-923 Poole Street monitoring site. As a result, ARB is recommending that the existing Kern County (Eastern Kern) ozone nonattainment area be designated nonattainment for the 0.070 ppm standard.

#### 2.6 Los Angeles-San Bernardino Counties (Western Mojave Desert)

The Los Angeles-San Bernardino Counties (Western Mojave Desert) nonattainment area would continue to comprise the northeastern portion of Los Angeles County (all of the Antelope Valley) and the central portion of San Bernardino County located within the Mojave Desert Air Basin. Ozone concentrations at all monitoring sites within the nonattainment area exceed the 0.070 ppm federal 8-hour ozone standard. The design value for the nonattainment area is 0.090 ppm at the Lancaster 43301 Division Street monitor.

#### 2.7 Los Angeles-South Coast Air Basin

The Los Angeles-South Coast Air Basin nonattainment area would continue to include the South Coast Air Basin: western Los Angeles County (including Catalina and San Clemente Islands), Orange County, southwestern San Bernardino County, and western Riverside County. The design value for the nonattainment area is 0.102 ppm at the Crestline monitoring site.

#### 2.8 Mariposa County

The Mariposa County nonattainment area will continue to include all of Mariposa County. The design value for Mariposa County is 0.075 ppm at the Jerseydale-6440 Jerseydale Road monitoring site.

## 2.9 Nevada County (Western Part)

This Nevada County (Western Part) nonattainment area will continue to comprise the portion of Nevada County from the western boundary with Yuba and Placer counties up to the crest of the Sierra Nevada Mountains. The current design value for Western Nevada County is 0.081 ppm at the Grass Valley-Litton Building monitoring site.

## 2.10 Riverside County (Coachella Valley)

The Riverside County (Coachella Valley) ozone nonattainment area would continue to include the portion of Riverside County that is located in the Salton Sea Air Basin. The design value for this area is 0.088 ppm at the Palm Springs-Fire Station monitoring site.

## 2.11 Sacramento Metropolitan Area

The Sacramento Metropolitan Area nonattainment area would continue to include all of Sacramento and Yolo counties, southern Sutter County, the Sacramento Valley Air Basin portion of Solano County, the Sacramento Valley and Mountain Counties Air Basin portions of Placer County, and the Mountain Counties Air Basin portion of El Dorado County. The design value for the nonattainment area is 0.081 ppm at the Placerville-Gold Nugget Way monitoring site.

## 2.12 San Diego County

The San Diego County nonattainment area would continue to include San Diego County. The design value for the nonattainment area is 0.079 ppm at the Alpine-Victoria Drive monitoring site.

## 2.13 San Francisco Bay Area

The San Francisco Bay Area nonattainment area would continue to comprise all of the San Francisco Bay Area Air Basin: Marin, Napa, Contra Costa, Alameda, Santa Clara, San Francisco, and San Mateo counties and the San Francisco Bay Area Air Basin portions of Solano and Sonoma counties. The design value for the nonattainment area is 0.073 ppm at the Livermore-793 Rincon Avenue ozone monitoring site in Alameda County.

## 2.14 San Joaquin Valley

The San Joaquin Valley nonattainment area would continue to comprise the entire San Joaquin Valley Air Basin: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and western Kern counties. The design value for the nonattainment area is 0.093 ppm at the Clovis-N Villa Avenue monitoring site in Fresno County.

## 2.15 San Luis Obispo (Eastern San Luis Obispo County)

The San Luis Obispo County nonattainment area would continue to include only the eastern half of San Luis Obispo County. The design value for the nonattainment area is 0.073 ppm at the Red Hills monitoring site.

## 2.16 Sutter Buttes

The Sutter Buttes are a small, isolated area of steep-ridged mountains located in the center of the southern Sacramento Valley. Elevations of the Sutter Buttes extend up to about 2,120 feet above sea level and are completely surrounded by flat terrain at only 60-70 feet above sea level. The Sutter Buttes are roughly circular and only 11 miles across, making the topography of the area extremely unique. The Sutter Buttes are also unpopulated, have no emission sources, and do not have any significant roads crossing over them.

An ozone monitor is sited at the top of the Sutter Buttes. For the 0.08 ppm federal 8-hour zone standard, the Sutter Buttes were designated as their own nonattainment area and the area was limited to the portion of the Sutter Buttes above 2,000 feet. For the 0.075 ppm standard, similar to Amador County, ozone concentrations dropped below the attainment threshold by the time U.S. EPA finalized designations; therefore, the Sutter Buttes nonattainment area was designated attainment. However, the 2015 design value for the Sutter Buttes is 0.072 ppm, which is slightly above the 0.070 ppm standard. As a result, ARB is recommending that the Sutter Buttes be designated as a separate nonattainment area and that the area be limited to the portion of the Sutter Buttes above 2,000 feet.

## 2.17 Tuolumne County

Tuolumne County is very similar to Amador County discussed above in terms of geography, population, emission sources, and proximity to other larger nonattainment areas. Just as Amador County was combined with Calaveras County into a larger nonattainment area, Tuolumne County was grouped with Mariposa County to form the Southern Mountain Counties nonattainment area for the 0.08 ppm federal 8-hour ozone standard. For the 0.075 ppm standard, as with Amador County and the Sutter Buttes, by the time U.S. EPA finalized designations, ozone concentrations in Tuolumne County had dropped sufficiently to merit an attainment designation. As a result, U.S. EPA eliminated the Southern Mountain Counties nonattainment area and designated Mariposa County as a separate nonattainment area.

The design value for Tuolumne County of 0.073 ppm is slightly above the new federal ozone standard and, with ozone concentrations in the region trending lower over time, it is expected to meet the standard within the next few years. In addition, because Tuolumne County and Mariposa County are fairly isolated from one another; are impacted from ozone transport from different, upwind nonattainment areas; do not have significant emission sources that impact ozone concentrations in the neighboring county; and operate and manage separate air quality programs, ARB is recommending that Tuolumne County be designated as a separate nonattainment area from the Mariposa County nonattainment area.

## 2.18 Tuscan Buttes

The Tuscan Buttes are located in Tehama County, which is in the northeastern portion of the Sacramento Valley. The Tuscan Buttes ozone monitor is located at an elevation of 1,844 feet and was sited to study high-elevation transport of pollutants from upwind urban areas into the upper-Sacramento Valley. Additionally, there are no emission sources or residents near the monitoring site and design values for low elevation sites in areas near the monitor are below the level of the standard, indicating that ozone concentrations on the Tuscan Buttes are isolated and unlike other monitors.

The Tuscan Buttes were designated nonattainment for the 0.075 ppm federal 8-hour ozone standard. Because of the high elevation location and a lack of population and emission sources in the vicinity of the monitor, the nonattainment area was limited to the portion of the Tuscan Buttes above 1,800 feet. The current design value for the Tuscan Buttes is 0.074 ppm; therefore, ARB is recommending that the Tuscan Buttes remain nonattainment and that the nonattainment area continue to be limited to the portion of the Tuscan Buttes above 1,800 feet. This approach is consistent with the approach U.S. EPA used in designating the Sutter Buttes ozone nonattainment area.

## 2.19 Ventura County

The Ventura County nonattainment area would continue to include only the continental portion of Ventura County and exclude the two Channel Islands within the county: Anacapa Island and San Nicolas Island. The design value for the nonattainment area is 0.077 ppm at the Simi Valley-Cochran Street monitoring site.

### **3.0 Rural Transport Areas**

The Clean Air Act allows for the designation of a Rural Transport Area based on the following two conditions:

1. The area does not contain emissions sources that make a significant contribution to monitored ozone concentrations in the area, or in other areas; and
2. The area does not include and is not adjacent to a Metropolitan Statistical Area (MSA)

Additionally, U.S. EPA's ozone guidance memorandum states that areas within a Metropolitan Statistical Area are eligible for consideration as Rural Transport Areas, provided that the two criteria listed above are also met. This is a change from previous guidance and prompted ARB to review all nonattainment areas in California. The Tuscan Buttes nonattainment area is the only nonattainment area in California that meets the conditions necessary for designation as a Rural Transport Area.

Because there are no VOC or NOx emission sources within the recommended Tuscan Buttes nonattainment area boundary and the recommended boundary is not within or adjacent to a MSA, ARB is requesting that the Tuscan Buttes nonattainment area be designated as a Rural Transport Area.

## **4.0 Attainment Areas**

Ozone air quality monitoring in California indicates that many areas have design values that meet the 0.070 ppm federal 8-hour ozone standard. Table 2 below includes a listing of all the areas attaining the new standard, the peak design value in each area, and the geographical extent of each area.

**Table 2**  
**Recommended California Attainment Areas**  
**for the 0.070 ppm Federal 8-Hour Ozone Standard**  
**(Based on 2013-2015 Ozone Air Quality Data)**

Attainment Area	Design Value (ppm)	Area Included
Colusa County	0.060	Colusa County
Eastern Riverside County	0.066	Eastern portion of Riverside County within the Mojave Desert Air Basin
Glenn County	0.065	Glenn County
Inyo County	0.069	Inyo County
Lake County	0.059	Lake County
North Central Coast Air Basin	0.068	Monterey, Santa Cruz, and San Benito counties
North Coast Air Basin	0.058	Del Norte, Humboldt, Mendocino, and Trinity counties and North Coast Air Basin portion of Sonoma County
Northeast Plateau Air Basin	0.061	Lassen, Modoc, and Siskiyou counties
Northeast San Bernardino County	0.067	Northern and eastern portions of San Bernardino County within the Mojave Desert Air Basin
Santa Barbara County	0.067	Continental portion of Santa Barbara County (excludes San Miguel, Santa Rosa, Santa Cruz, and Santa Barbara islands)
Shasta County	0.067	Shasta County
Sutter and Yuba Counties	0.064	Yuba County and portion of Sutter County outside of the Sacramento Metropolitan and Sutter Buttes nonattainment areas
Tehama County	0.067	Portion of Tehama County outside of the Tuscan Buttes nonattainment area
Western San Luis Obispo County	0.061	Portion of San Luis Obispo County to the west of the Eastern San Luis Obispo County nonattainment area

## 5.0 Unclassifiable Areas

The areas listed in Table 3 have either no ozone monitoring data or the available monitoring data do not meet completeness criteria established by U.S. EPA; therefore, ARB recommends that the areas listed in Table 3 below be considered unclassifiable for the 0.070 ppm federal 8-hour ozone standard.

Four of the areas listed below (Eastern Nevada County, Northeastern Kern County, Northern Channel Islands, and Northern Mountain Counties) do not have any ozone monitoring. However, an ozone monitor began operating near the city of Bishop in Mono County at the beginning of 2015 and there will likely be two years of data available by the time U.S. EPA prepares the final designations. Based on the final 2015 data and preliminary 2016 data, it is expected that Mono County could be designated attainment.

Similarly, an ozone monitor in Tahoe City, within the Placer County portion of the Lake Tahoe Basin, began operation in November 2013. As a result, this monitor is expected to have three full years of data available by the time U.S. EPA prepares final designations and this area is expected to be in attainment of the 0.070 ppm federal 8-hour ozone standard as well.

**Table 3**  
**Recommended California Unclassifiable Areas for the**  
**0.070 ppm Federal 8-Hour Ozone Standard**

Unclassifiable Area	Area Included
Eastern Nevada County	Portion of Nevada County east of the crest of the Sierra Nevada Mountains
Northern Great Basin Valleys Air Basin	Alpine and Mono counties
Lake Tahoe Air Basin	Eastern portion of Placer and El Dorado counties within the Lake Tahoe Air Basin
Northeastern Kern County	Portion of Kern County within the Indian Wells Valley
Northern Channel Islands	The Channel Islands located in the South Central Coast Air Basin: Anacapa, San Miguel, San Nicholas, Santa Barbara, Santa Cruz, and Santa Rosa
Northern Mountain Counties	Plumas and Sierra counties

## 6.0 Environmental Analysis

### 6.1 Introduction

This chapter provides the basis for ARB's determination that the proposed action is exempt from the requirements of the California Environmental Quality Act (CEQA). A brief explanation of this determination is provided in Section 6.2 below. ARB's regulatory program, which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State's ambient air quality, has been certified by the California Secretary for Natural Resources under Public Resources Code section 21080.5 of CEQA (14 CCR 15251(d)). Public agencies with certified regulatory programs are exempt from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. ARB, as a lead agency, prepares a substitute environmental document (referred to as an "Environmental Analysis" or "EA") as part of the Staff Report prepared for a proposed action to comply with CEQA (17 CCR 60000-60008). If the proposal is finalized, a Notice of Exemption will be filed with the State Clearinghouse for public inspection.

### 6.2 Analysis

ARB has determined that the proposed action is exempt from CEQA under the general rule or "common sense" exemption (14 CCR 15061(b)(3)). CEQA Guidelines state "the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." The proposal is also categorically exempt from CEQA under the "Class 8" exemption (14 CCR 15308) because it is an action taken by a regulatory agency for the protection of the environment. By October 1, 2016, all states are required to submit to U.S. EPA recommendations for area designations, together with appropriate boundaries, for the updated federal 8-hour average ozone standard. ARB staff has performed analysis to determine appropriate designation recommendations throughout the State using the criteria outlined in the U.S. EPA's guidance memorandum<sup>2</sup>. The purpose of this report is to share ARB staff's technical analysis and initial recommendations to be sent to U.S. EPA. Based on ARB's review it can be seen with certainty that there is no possibility that the proposed action may result in a significant adverse impact on the environment. Further, the proposed action is designed to protect the environment and ARB found no substantial evidence indicating that submitting these area designation recommendations to U.S. EPA could adversely affect air quality or any other environmental resource area, or that any of the exceptions to the exemption applies (14 CCR 15300.2). Therefore, this activity is exempt from CEQA.

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<sup>2</sup> February 25, 2016, Area Designations for the 2015 Ozone National Ambient Air Quality Standards, Memorandum from Janet G. McCabe, Acting Assistant Administrator, Office of Air and Radiation to Regional Administrators, Regions 1-10.

## **Enclosure 2**

### **Five Factor Analysis**

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## ENCLOSURE 2

### FIVE FACTOR ANALYSIS FOR NEW NONATTAINMENT AREAS FOR THE 2015 FEDERAL 8-HOUR OZONE STANDARD

#### CONTINUING NONATTAINMENT AREAS

For the 2008 federal 8-hour ozone standard of 0.075 ppm, the U.S. Environmental Protection Agency (U.S. EPA) designated 16 areas in California as nonattainment. On October 1, 2015, U.S. EPA lowered the standard to 0.070 ppm. Based on design values calculated from ambient ozone air quality data collected between 2013 and 2015, all 16 areas previously designated as nonattainment would continue to be nonattainment for the new and more stringent standard. In addition, the nonattainment area boundaries designated for the previous standard remain relevant and accurately represent the areas of California with continuing ozone challenges. The factors that were evaluated when determining the current designations are still applicable and the U.S. EPA has consolidated those factors into the following five factors that were used to determine that the existing areas and boundaries should remain unchanged:

1. Air Quality Data
2. Emissions and Emissions-Related Data
3. Meteorology
4. Geography/Topography
5. Jurisdictional Boundaries

Each of these factors was defined in the ARB staff report "Recommended Area Designations for the 0.070 PPM Federal 8-Hour Ozone Standard" included in Enclosure 1.

Based on the factors above, ARB staff recommends retaining all 16 nonattainment areas and associated boundaries. Most of these areas are long-standing ozone planning areas that already have well-established air quality management programs and the regulations in place to quickly move forward with implementation of the 0.070 ppm ozone standard. A brief summary of the existing nonattainment areas and boundaries is provided below.

#### Calaveras County

The Calaveras County nonattainment area would continue to include all of Calaveras County, which is under the jurisdiction of the Calaveras County Air Pollution Control District (APCD). The design value for Calaveras County is 0.073 ppm at the San Andreas-Gold Strike Road monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Chico (Butte County)

The Chico (Butte County) nonattainment area would continue to include all of Butte County, under the jurisdiction of the Butte County Air Quality Management District (AQMD). The design value for Butte County is 0.074 ppm at the Paradise-4405 Airport Road monitoring site, located in the eastern foothills of the county and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

In addition, the Butte County AQMD has also requested that the nonattainment area name be changed for the new standard to "Butte County" since the ozone monitor located in Chico is well below the standard, and including "Chico" in the nonattainment area name is not reflective of where the highest ozone concentrations are located. However, the nonattainment area should continue to include the entire county because the emissions from the Chico area do contribute to the ozone in the foothill portion of the nonattainment area, which is above the ozone standard.

### Imperial County

The Imperial County nonattainment area would continue to include all of Imperial County, under the jurisdiction of the Imperial County APCD. The design value for Imperial County is 0.078 ppm at the El Centro-9th Street monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Kern County (Eastern Kern)

The Kern County (Eastern Kern) nonattainment area would continue to include most of the eastern portion of Kern County within the Mojave Desert Air Basin that is under the jurisdiction of the Eastern Kern (APCD). The design value for the nonattainment area is 0.083 ppm at the Mojave-923 Poole Street monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Los Angeles-San Bernardino Counties (Western Mojave Desert)

The Los Angeles-San Bernardino Counties (Western Mojave Desert) nonattainment area would continue to include the northeastern portion of Los Angeles County, under the jurisdiction of the Antelope Valley AQMD, and the central portion of San Bernardino County, under the jurisdiction of the Mojave Desert AQMD. Both portions of the counties comprising this nonattainment area are completely within the Mojave Desert Air Basin. The design value for the nonattainment area is 0.090 ppm at the Lancaster-43301 Division Street monitor in Los Angeles County and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Los Angeles-South Coast Air Basin

The Los Angeles-South Coast Air Basin nonattainment area would continue to include all of Los Angeles County except for the northeastern portion in the Mojave Desert Air Basin, Orange County, southwestern San Bernardino County, and western Riverside County, all of which is under the jurisdiction of the South Coast AQMD. The design value for the nonattainment area is 0.102 ppm at the Crestline monitoring site in San Bernardino County and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Mariposa County

The Mariposa County nonattainment area would continue to include all of Mariposa County, which is under the jurisdiction of the Maricopa County APCD. The design value for Mariposa County is 0.075 ppm at the Jerseydale-6440 Jerseydale Road monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Nevada County (Western Part)

The Nevada County (Western Part) nonattainment area would continue to include the portion of Nevada County from the western boundary with Yuba and Placer counties up to the crest of the Sierra Nevada Mountains in the east, which is under the jurisdiction of the Northern Sierra AQMD. The design value for the nonattainment area is 0.081 ppm at the Grass Valley-Litton Building monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Riverside County (Coachella Valley)

The Riverside (Coachella Valley) nonattainment area would continue to include the central portion of Riverside County that is located within the Salton Sea Air Basin, which is under the jurisdiction of the South Coast AQMD. The design value for the Coachella Valley is 0.088 ppm at the Palm Springs-Fire Station monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### Sacramento Metropolitan Area

The Sacramento Metropolitan nonattainment area would continue to include all of Sacramento and Yolo counties, southern Sutter County, the eastern half of Solano County within the Sacramento Valley Air Basin, the western portion of Placer County within the Sacramento Valley and Mountain Counties air basins, and the western portion of El Dorado County within the Mountain Counties Air Basin. The nonattainment area is under the jurisdiction of multiple air districts, including the Sacramento

Metropolitan AQMD, the Feather River AQMD, the Yolo-Solano AQMD, the El Dorado AQMD, and the Placer County APCD. The design value for the nonattainment area is 0.081 ppm at the Placerville-Gold Nugget Way monitoring site in Eldorado County and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### San Diego County

The San Diego County nonattainment area would continue to include all of San Diego, which is under the jurisdiction of the San Diego County APCD. The design value for San Diego County is 0.079 ppm at the Alpine-Victoria Drive monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### San Francisco Bay Area

The San Francisco Bay Area nonattainment area would continue to include Alameda, Contra Costa, Marin, Napa, Santa Clara, San Francisco, and San Mateo counties, as well as the western portion of Solano County and the southern portion of Sonoma County within the San Francisco Bay Area Air Basin, all of which is under the jurisdiction of the Bay Area AQMD. The design value for the nonattainment area is 0.073 ppm at the Livermore-793 Rincon Avenue ozone monitor in Alameda County and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### San Joaquin Valley

The San Joaquin Valley nonattainment area would continue to include Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties, which is under the jurisdiction of the San Joaquin Valley APCD. The design value for the nonattainment area is 0.093 ppm at the Clovis-N Villa Avenue monitoring site in Fresno County and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

### San Luis Obispo (Eastern San Luis Obispo County)

The San Luis Obispo (Eastern San Luis Obispo County) nonattainment area would continue to include the eastern half of San Luis Obispo County, all of which is under the jurisdiction of the San Luis Obispo County APCD. The design value for nonattainment area is 0.073 ppm at the Red Hills monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

## Tuscan Buttes

The Tuscan Buttes nonattainment area would continue to include the portion of the Tuscan Buttes above an elevation of 1,800 feet. The Tuscan Buttes are located in Tehama County which is under the jurisdiction of the Tehama County APCD. The design value for the nonattainment area is 0.074 ppm at the Tuscan Butte monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

## Ventura County

The Ventura County nonattainment area would continue to include all of Ventura County, except the Channel Islands of Anacapa Island and San Nicolas Island. Ventura County is under the jurisdiction of the Ventura County APCD. The design value for the nonattainment area is 0.077 ppm at the Simi Valley-Cochran Street monitoring site and the five factors have not changed significantly enough to justify changing the nonattainment area boundary for the new ozone standard.

## **ADDITIONAL NONATTAINMENT AREAS**

The following three areas are currently attainment for the 0.075 ppm federal 8-hour ozone standard, but were previously nonattainment for the 1997 federal 8-hour ozone standard of 0.08 ppm. Based on the five factor analysis discussed below, each area is recommended to be nonattainment for the 0.070 ppm federal 8-hour ozone standard. All three areas are rural in nature, have limited populations and emission sources, and are dominated by pollutant transport from neighboring urban areas, which makes them different from most of the existing nonattainment areas.

Justification for each of these additional nonattainment areas was determined using the criteria outlined in the U.S. EPA's guidance memorandum<sup>1</sup> and the five factors listed above.

## Amador County

### ***Air Quality Data***

Ozone concentrations in Amador County are measured by a single monitor (Jackson-Clinton Road) in the city of Jackson. However, this monitor is located in an area with one of the largest populations in the county and where ozone concentrations would be expected to be the highest. The design value for this monitor is 0.071 ppm; which is only 0.001 ppm above the new standard and substantially lower than the design values in all of the nonattainment areas bordering Amador County. In addition,

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<sup>1</sup> February 25, 2016, Area Designations for the 2015 Ozone National Ambient Air Quality Standards, Memorandum from Janet G. McCabe, Acting Assistant Administrator, Office of Air and Radiation to Regional Administrators, Regions 1-10.

the design value at the Jackson monitor has steadily decreased at a rate of approximately 0.001 ppm per year over the past 20 years and so have the number of days above the standard, which decreased from 45 in 1999 to just two in 2015 (based on the 0.075 ppm federal 8-hour ozone standard).

Considering the steady improvement in ozone concentrations in Amador County and the small decrease needed to reach attainment of the 0.070 ppm federal standard relative to neighboring nonattainment areas, such as the Sacramento Metropolitan nonattainment area with a design value 0.081 ppm, ARB recommends that the nonattainment area be limited to the Amador County boundary.

### ***Emissions and Emission-Related Data***

The U.S. Census Bureau estimates a population of 37,001 people for Amador County in 2015, which was less than 1 percent of the total State population. From this limited population, ARB's California Emission Projection Analysis Model (CEPAM) for the 2016 Ozone SIP Baseline Emission Projection estimates that summertime NO<sub>x</sub> in Amador County is approximately 4.3 tons per day (tpd) and reactive organic gases (ROG) are 4.9 tpd. These quantities are very small when compared to the upwind urban area NO<sub>x</sub> amounts of 78 tpd from the Sacramento Metropolitan nonattainment area and 63 tpd from Stockton and Modesto areas in the northern portion of the San Joaquin Valley nonattainment area. Similarly, ROG emissions from the Sacramento area are approximately 96 tpd and the Stockton and Modesto areas are 80 tpd. Because ozone concentrations in Amador County are dominated by emissions and transport from metropolitan nonattainment areas to the west and northwest of Amador County, local emissions contribute very little to the ozone exceedance in Amador County. In addition, the local emissions do not significantly contribute to high ozone concentrations in neighboring counties. As a result, Amador County should be defined as a separate nonattainment area.

### ***Meteorology***

The foothills of Amador County allow air to flow easily into the region from the west under normal summertime Delta breeze conditions, but the rugged terrain on the eastern side of the County requires much stronger winds, associated with large-scale low pressure systems, to transport air over the crest of the Sierras. As a result, Amador County is typically just an eastward extension of the Sacramento Valley Air Basin under northwesterly wind conditions and the San Joaquin Valley Air Basin under westerly wind conditions. The County also experiences the daily recirculation of air up the slope during the day and back down the slope at night, especially between the Central Valley floor and Highway 49, which travels along the foothills from north to south at an elevation of about 1,000-2,000 feet.

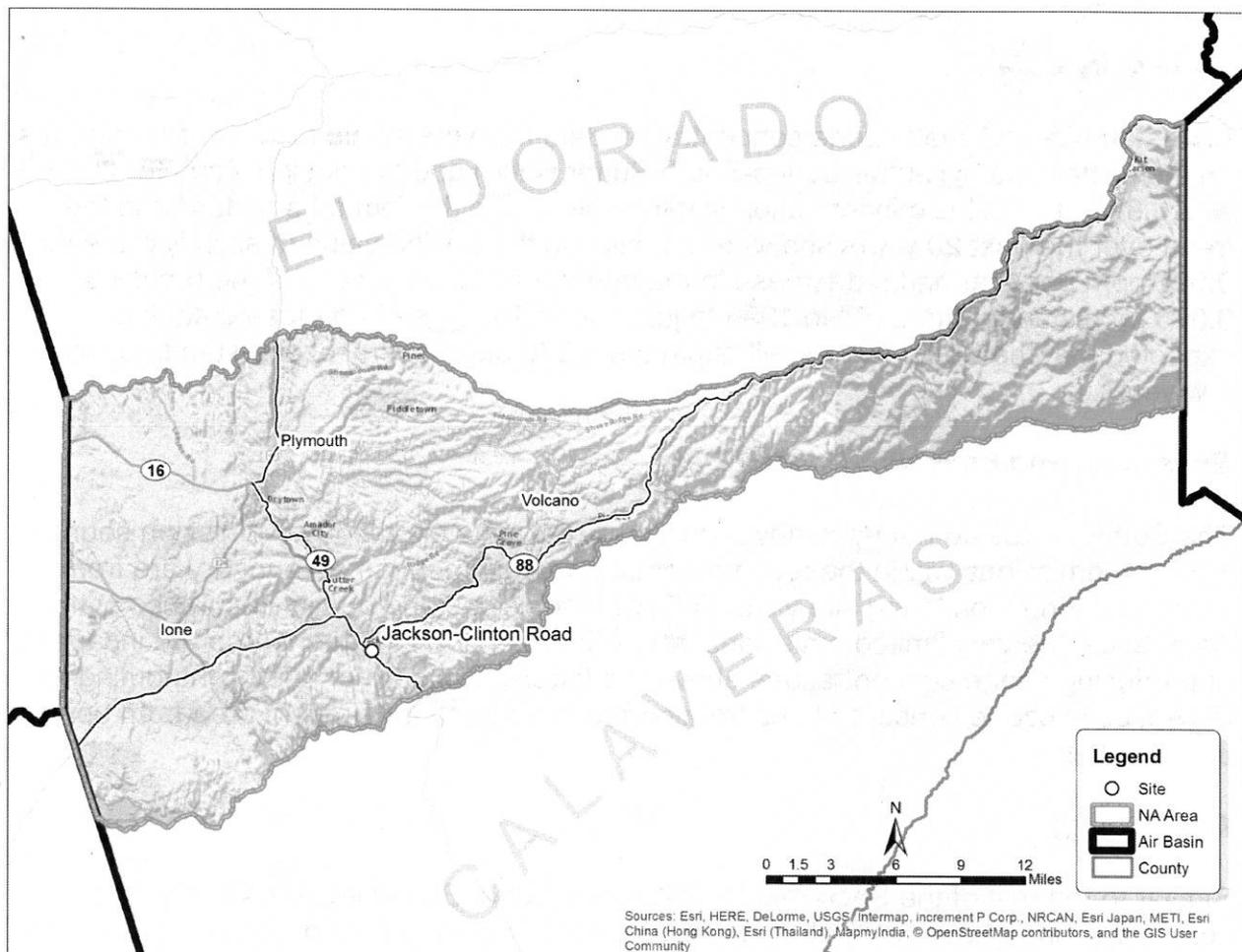
Similar to most of inland California, the air in Amador County is typically dry, allowing for wide temperature ranges each day and the formation of a temperature inversion at night. During the summer ozone season, ozone can be transported up into the foothills

of Amador County and become trapped in mountain valleys, and with limited local emissions to react with and break down ozone in the atmosphere during the evening and overnight hours when sunlight is not available to drive ozone formation processes, ozone concentrations have the potential to remain high for as long as 24-48 hours in a row. Only a weather system with strong winds is able to vent the mountain valleys.

### Geography/Topography

Amador County consists of gradual foothills rising out of California's Central Valley on the western side of the County that transition to steeper, more complex terrain with high mountain peaks and a broad range of valleys spanning the full north-south extent of the County on the eastern side. Elevation within Amador County ranges from as low as 250 feet above sea level on the western boundary of the basin to over 9,000 feet at the crest of the Sierra Nevada Mountains, with moderate sloping for the first 1,000-2,000 feet of rise and sharp mountain ridges from the foothills eastward. A map of the County with terrain is shown in Figure 1.

Figure 1 Amador County



The rugged terrain in Amador County largely limits population growth and inhibits the development of roads and vehicle traffic. The same terrain limits air flow as well, which is another factor supporting the designation of Amador County as a separate nonattainment area.

### ***Jurisdictional Boundaries***

The Amador County lines are the primary existing jurisdictional boundary and also form the boundary for the Amador County APCD. Air quality in Amador County is managed at the local level through air quality rules and regulations that address the requirements for federal and State air quality laws. In addition, the County is not part of a Metropolitan Planning Organization (MPO) and transportation conformity is handled at the District level. Because Amador County is very close to attaining the new 0.070 ppm standard and does not significantly contribute to exceedances of the standard in neighboring counties, it is most efficient to have the nonattainment boundary coincide with the existing jurisdictional boundaries; therefore, ARB recommends that Amador County be defined as a separate nonattainment area.

### **Sutter Buttes**

#### ***Air Quality Data***

ARB staff has reviewed ozone concentration data from the single monitor that operates on the Sutter Buttes (Sutter Buttes-South Sutter Butte) and the design value for 2015 was 0.072 ppm. This concentration is minimally above the federal standard and the trend over the past 20 years shows a reduction in the design value of slightly more than 0.001 ppm per year and a decrease in the number of exceedances of the previous 0.075 ppm standard from 54 in 1996 to just 1 in 2015. Based on these data, it is expected that the Sutter Buttes will attain the 0.070 ppm federal ozone standard within a few years.

#### ***Emissions and Emission-Related Data***

The Sutter Buttes do not have any permanent residents or stationary emission sources. The only emissions within the recommended nonattainment area boundary are from vehicles during monitoring site visits by ARB technicians and quality assurance staff. As a result, the very limited emissions from within the nonattainment area are incapable of producing ozone concentrations above the federal standard or even contributing to increases in ozone concentrations transported into the nonattainment area from upwind urban areas.

#### ***Meteorology***

Similar to the rest of the Sacramento Valley, the Sutter Buttes experience dry, hot conditions throughout much of the summer ozone season due to broad upper-level high pressure systems over the Eastern Pacific Ocean and Western U.S. These large-scale

weather patterns tend to keep skies clear, limit wind speeds, and contribute to the formation of temperature inversions at around 1,000-2,000 feet above the ground, which limit vertical mixing in the lower atmosphere and can allow pollutant concentrations to build for several days at a time.

Part of the complexity for the Sutter Buttes is that the ozone monitor is often above the temperature inversion where, during stagnant weather, ozone and ozone precursors that transport over the Sutter Buttes from urban areas to the south and southwest can remain in place for many hours and have no fresh emissions from local sources to react with the ozone and break it down. As a result, once high ozone concentrations or ozone precursors move into the area, they react during the daytime hours to form additional ozone or linger at night for several hours, leading high 8-hour average concentrations both cases.

The predominant wind flow direction for the Sutter Buttes is from south to north during the summer months due to higher temperatures at the north end of the Sacramento Valley than the southern end, which is open to cooler ocean air to the west in the Delta region. These southerly winds are the primary mechanism for transporting ozone into the Sutter Buttes from neighboring metropolitan areas. The only other common, but less frequent, wind flow pattern involves wind moving from north to south down the Sacramento Valley. These winds are typically associated with transitional weather patterns behind storms that have moved through California and ahead of building high pressure. During these periods, winds are blowing from cleaner areas in the north toward the urban areas, the atmosphere is well-mixed, and pollutant concentrations are low; therefore, high ozone concentrations would not be expected during these periods.

Under either wind flow pattern discussed above, the Sutter Buttes could not contribute to increased ozone concentrations in any nearby areas because of the lack of emission sources. As a result, the Sutter Buttes should be a separate nonattainment area.

### ***Geography/Topography***

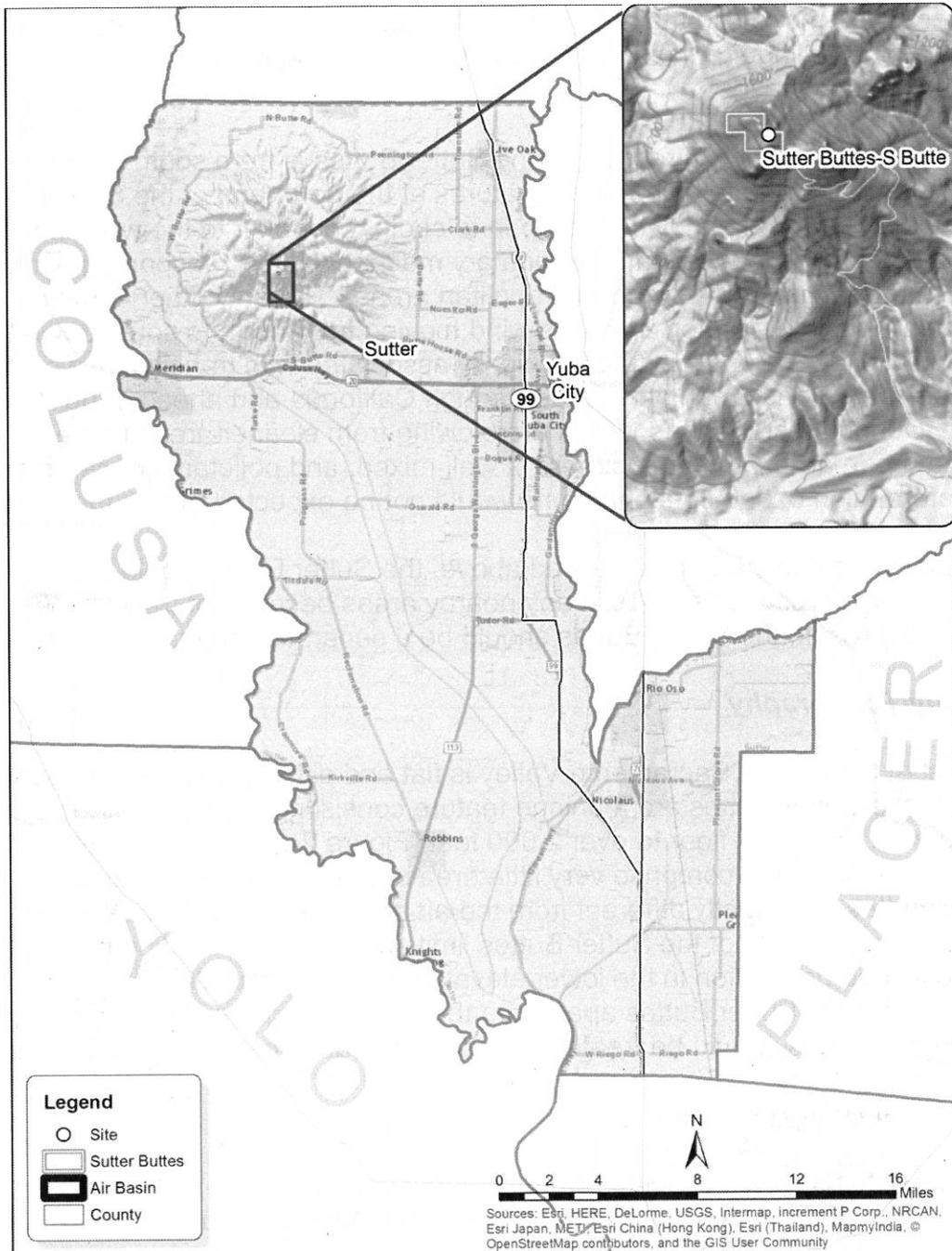
While most of the central Sacramento Valley is flat and either populated or used for agriculture, the Sutter Buttes are a unique feature consisting of abrupt, steep slopes extending from the valley floor to over 2,000 feet (Figure 2). The Sutter Buttes are only 11 miles in diameter and comprise very little area of the Valley, but the air at the top of the Sutter Buttes is distinctly different from the air near the Valley floor because of the terrain. The ruggedness of the Sutter Buttes limits accessibility, leading to very few roads and limited population in the lower elevation areas surrounding the peaks. The topography sets the Sutter Buttes apart from the surrounding areas and further justifies that the Sutter Buttes should be treated as a separate and limited nonattainment area.

### ***Jurisdictional Boundaries***

The Sutter Buttes are located within Sutter County and under the jurisdiction of the Feather River AQMD. However, both of these boundaries are much broader than the

Sutter Buttes and most of the area within them exhibit very different characteristics with regard to ozone air quality, population, emissions, and topography than the Sutter Buttes. Because neither boundary is representative of the Sutter Buttes, they should not be used for defining the nonattainment area boundary. As a result, ARB is recommending that the Sutter Buttes nonattainment area be limited to the portion of Sutter Buttes above 2,000 feet, which is the same boundary previously designated by U.S. EPA for the 1997 federal 8-hour standard of 0.08 ppm.

Figure 2 Sutter Buttes



## Tuolumne County

### ***Air Quality Data***

Ozone concentrations in Tuolumne County are measured by the Sonora-Barretta Street ozone monitor in the city of Sonora. This monitor is located in the only incorporated city in the county and where ozone concentrations would be expected to be the highest. The design value for this monitor is 0.073 ppm, which is only 0.003 ppm above the new standard and the same or lower than the design values for each of the nonattainment areas bordering Tuolumne County. In addition, the design value at the Sonora monitor has steadily decreased at a rate of approximately 0.001 ppm per year over the past 20 years and so have the number of days above the standard, which decreased from 57 in 1999 to just 4 in 2015 (based on the 0.075ppm federal 8-hour ozone standard).

Considering the steady improvement in ozone concentrations in Tuolumne County and the small decrease needed to reach attainment of the 0.070 ppm federal standard relative to neighboring nonattainment areas, such as the northern portion of the San Joaquin Valley nonattainment area with a design value 0.082 ppm, ARB recommends that the nonattainment area be limited to the Tuolumne County boundary.

### ***Emissions and Emission-Related Data***

The population of Tuolumne County in 2015 was estimated to be 53,709 by the U.S. Census Bureau, which was slightly more than one percent of the total State population. From this limited population, ARB's California Emission Projection Analysis Model (CEPAM) for the 2016 Ozone SIP Baseline Emission Projection estimates that summertime NO<sub>x</sub> in Tuolumne County is approximately 3.9 tpd and ROG are 8.8 tpd. These quantities are very small when compared to the upwind urban area NO<sub>x</sub> amounts of 63 tpd from Stockton and Modesto areas in the northern portion of the San Joaquin Valley nonattainment area. Similarly, ROG emissions from the Stockton and Modesto areas are 80 tpd. Because ozone concentrations in Tuolumne County are dominated by emissions and transport from metropolitan nonattainment areas to the west of Tuolumne County, local emissions contribute very little to the ozone exceedance in Tuolumne County. In addition, the local emissions do not significantly contribute to high ozone concentrations in neighboring counties. As a result, Tuolumne County should be defined as a separate nonattainment area.

### ***Meteorology***

Similar to the rest of the Mountain Counties Air Basin, the foothills of Tuolumne County allow air to flow easily into the region from the west under normal summertime Delta breeze conditions, but the rugged terrain on the eastern side of the County requires much stronger winds, associated with large-scale low pressure systems, to transport air over the crest of the Sierras. As a result, Tuolumne County is typically just an eastward extension of the San Joaquin Valley Air Basin under the predominant west-northwesterly wind conditions. The County also experiences the daily recirculation

of air up the slope during the day and back down the slope at night, especially between the Central Valley floor and Highway 49, which travels along the foothills from north to south at an elevation of about 1,000-2,000 feet.

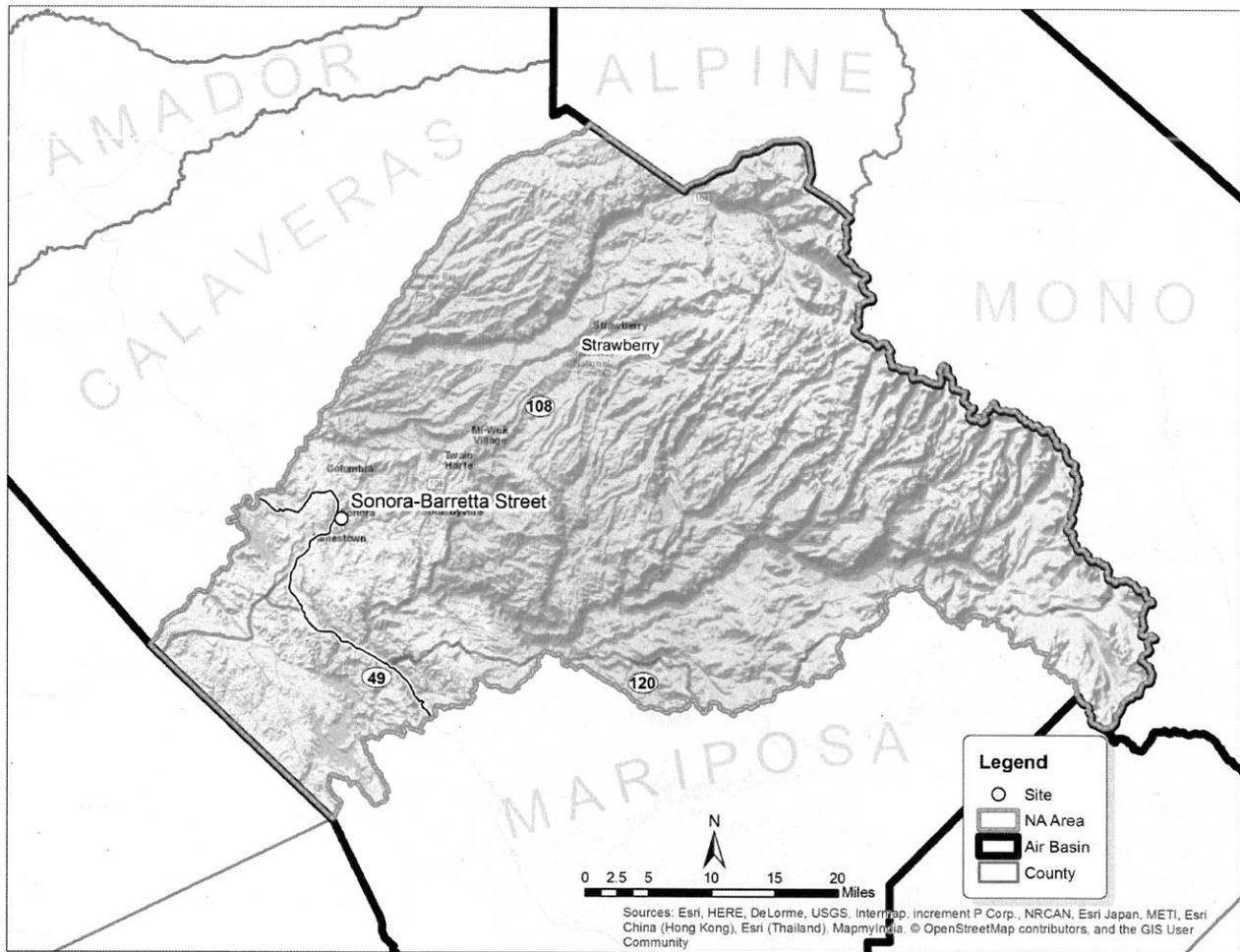
Additionally, the air in Tuolumne County is typically dry, allowing for wide temperature ranges each day and the formation of a temperature inversion at night. During the summer ozone season, ozone can be transported up into the foothills of Tuolumne County and become trapped in mountain valleys, and with limited local emissions to react with and break down ozone in the atmosphere during the evening and overnight hours when sunlight is not available to drive ozone formation processes, ozone concentrations have the potential to remain high for as long as 24-48 hours in a row. Only a weather system with strong winds is able to vent the mountain valleys.

### ***Geography/Topography***

Tuolumne County, like most of the counties on the western side of the Sierra Nevada Mountains, consists of gradual foothills rising out of California's Central Valley on the western side of the County that transition to steeper, more complex terrain with high mountain peaks and a broad range of valleys spanning the full north-south extent of the County on the eastern side. Elevation within Tuolumne County ranges from as low as 400 feet above sea level on the western boundary of the County to over 12,000 feet at the crest of the Sierra Nevada Mountains, with moderate sloping for the first 1,000-2,000 feet of rise and sharp mountain ridges from the foothills eastward. A map of Tuolumne County with terrain is shown in Figure 3.

The rugged terrain in Tuolumne County largely limits population growth and inhibits the development of roads and vehicle traffic. The same terrain limits air flow as well, which is another factor supporting the designation of Tuolumne County as a separate nonattainment area.

Figure 3 Tuolumne County



### ***Jurisdictional Boundaries***

The Tuolumne County lines are the primary existing jurisdictional boundary and also form the boundary for the Tuolumne County APCD. Air quality in Amador County is managed at the local level through air quality rules and regulations that address the requirements for federal and State air quality laws. In addition, the County is not part of a MPO and transportation conformity is handled at the District level. Because Tuolumne County is close to attaining the new 0.070 ppm standard and does not significantly contribute to exceedances of the standard in neighboring counties, it is most efficient to have the nonattainment boundary coincide with the existing jurisdictional boundaries; therefore, ARB recommends that Tuolumne County be defined as a separate nonattainment area.

## **Enclosure 3**

### **Boundary Descriptions**

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**ENCLOSURE 3**

**BOUNDARY RECOMMENDATIONS FOR NEW NONATTAINMENT AREAS  
FOR THE 2015 FEDERAL 8-HOUR OZONE STANDARD**

**AMADOR COUNTY**

All of Amador County.

**SUTTER BUTTES**

That portion of the immediate Sutter Buttes area at or above 2,000 feet in elevation.

**TUOLUMNE COUNTY**

All of Tuolumne County.

## **Enclosure 4**

### **Ozone Design Values**

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## ENCLOSURE 4

### Summary of 4<sup>th</sup> Highest Concentrations and Federal 8-Hour Ozone Design Values for all California Ozone Monitoring Sites (Based on 2013-2015 Ozone Air Quality Data)<sup>1</sup>

Air District	County	AQS ID	Site Name	Year			2015 Design Value (ppm)
				2013 4 <sup>th</sup> High (ppm)	2014 4 <sup>th</sup> High (ppm)	2015 4 <sup>th</sup> High (ppm)	
Amador County APCD	Amador	060050002	Jackson-Clinton Road	0.066	0.074	0.074	0.071
Antelope Valley AQMD	Los Angeles	060379033	Lancaster-43301 Division Street	0.090	0.081	0.100	0.090
Bay Area AQMD	Alameda	060010007	Livermore-793 Rincon Avenue	0.069	0.076	0.074	0.073
		060010009	Oakland-9925 International Blvd	0.046	0.057	0.055	0.052
		060010011	Oakland-West	0.044	0.051	0.052	0.049
		060012001	Hayward-La Mesa	0.059	0.072	0.064	0.065
		060012005	Livermore-13224 Patterson Pass Road			0.075	N/A
	Contra Costa	060130002	Concord-2975 Treat Blvd	0.057	0.067	0.070	0.064
		060131002	Bethel Island Road	0.062	0.069	0.068	0.066
		060131004	San Pablo-Rumrill Blvd	0.052	0.055	0.059	0.055
		060132007	San Ramon-9885 Alcosta Bl	0.065	0.072	0.074	0.070
	Marin	060410001	San Rafael	0.057	0.064	0.063	0.061
	Napa	060550003	Napa-Jefferson Avenue	0.055	0.062	0.066	0.061
	San Francisco	060750005	San Francisco-Arkansas Street	0.043	0.052	0.050	0.048
	San Mateo	060811001	Redwood City	0.056	0.064	0.059	0.059
	Santa Clara	060850002	Gilroy-9th Street	0.063	0.071	0.068	0.067
		060850005	San Jose-Jackson Street	0.060	0.065	0.065	0.063
		060851001	Los Gatos	0.062	0.069	0.072	0.067
		060852006	San Martin-Murphy Avenue	0.067	0.073	0.071	0.070
	Solano	060950004	Vallejo-304 Tuolumne Street	0.055	0.064	0.064	0.061
		060950005	Fairfield-Chadbourne Road	0.061	0.063	0.067	0.063
	Sonoma	060970004	Sebastopol-103 Morris Street		0.054	0.056	N/A
Butte County AQMD	Butte	060070007	Paradise-4405 Airport Road	0.073	0.074	0.075	0.074
		060070008	Chico-East Avenue	0.065	0.066	0.067	0.066
Calaveras County APCD	Calaveras	060090001	San Andreas-Gold Strike Road	0.067	0.071	0.081	0.073
Colusa County APCD	Colusa	060111002	Colusa-Sunrise Blvd	0.056	0.061	0.064	0.060
Eastern Kern APCD	Kern	060290011	Mojave-923 Poole Street	0.081	0.089	0.080	0.083
El Dorado County AQMD	El Dorado	060170010	Placerville-Gold Nugget Way	0.082	0.082	0.080	0.081
		060170012	Echo Summit	0.066	0.068		N/A
		060170020	Cool-Highway 193	0.076	0.083	0.080	0.079
Feather River AQMD	Sutter	061010003	Yuba City-Almond Street	0.060	0.069	0.064	0.064
	Yuba	061010004	Sutter Buttes-S Butte	0.071	0.075	0.072	0.072
	Yuba	No Monitors					

Note: Blank cells indicate incomplete or no data available; therefore, a design value cannot be calculated.

Air District	County	AQS ID	Site Name	Year			2015 Design Value (ppm)
				2013 4 <sup>th</sup> High (ppm)	2014 4 <sup>th</sup> High (ppm)	2015 4 <sup>th</sup> High (ppm)	
Glenn County APCD	Glenn	060210003	Willows-720 N Colusa Street	0.066	0.067	0.064	0.065
Great Basin Unified APCD	Alpine	No Monitors					
	Inyo	060270002	Bishop-Line			0.062	N/A
		060270101	Death Valley Natl Monument	0.070	0.069	0.070	0.069
Mono	No Monitors						
Imperial County APCD	Imperial	060250005	Calexico-Ethel Street	0.078	0.078	0.077	0.077
		060251003	El Centro-9th Street	0.080	0.078	0.077	0.078
		060254003	Westmorland-W 1st Street			0.057	N/A
		060254004	Niland-English Road	0.072	0.069	0.071	0.070
Lake County AQMD	Lake	060333001	Lakeport-Lakeport Blvd	0.059	0.060	0.058	0.059
Lassen County APCD	Lassen	No Monitors					
Mariposa County APCD	Mariposa	060430003	Yosemite Natl Park-Turtleback Dome	0.073	0.077	0.073	0.074
	Mariposa	060430006	Jerseydale - 6440 Jerseydale	0.077	0.077	0.071	0.075
Mendocino County AQMD	Mendocino	060450008	Ukiah-E Gobbi Street		0.052	0.053	N/A
Modoc County APCD	Modoc	No Monitors					
Mojave Desert AQMD	Riverside	060659003	Blythe-445 West Murphy Street	0.057	0.078	0.063	0.066
	San Bernardino	060710001	Barstow	0.078	0.084	0.077	0.079
		060710012	Phelan-Beekley Road and Phelan Road	0.088	0.093	0.086	0.089
		060710306	Victorville-14306 Park Avenue	0.090	0.084	0.093	0.089
		060711234	Trona-Athol and Telegraph	0.065	0.068	0.068	0.067
		060714001	Hesperia-Olive Street	0.083	0.087	0.093	0.087
		060719002	Joshua Tree-National Monument	0.085	0.090	0.085	0.086
Monterey Bay ARD	Monterey	060530002	Carmel Valley-Ford Road	0.059	0.063	0.059	0.060
		060530008	King City-415 Pearl Street	0.056	0.062	0.062	0.060
		060531003	Salinas-#3	0.051	0.059	0.055	0.055
	San Benito	060690002	Hollister-Fairview Road	0.059	0.068	0.063	0.063
		060690003	Pinnacles National Monument	0.071	0.069	0.066	0.068
	Santa Cruz	060870007	Santa Cruz-2544 Soquel Avenue	0.049	0.062	0.057	0.056
North Coast Unified AQMD	Del Norte	No Monitors					
	Humboldt	060231004	Eureka-Jacobs	0.045	0.043	0.045	0.044
		060231005	Eureka-Humboldt Hill	0.046	0.041	0.047	0.044
	Trinity	No Monitors					
Northern Sierra AQMD	Nevada	060570005	Grass Valley-Litton Building	0.078	0.081	0.084	0.081
		060570007	White Cloud Mountain	0.065	0.078	0.072	0.071
	Plumas	No Monitors					
	Sierra	No Monitors					
Northern Sonoma County APCD	Sonoma	060971003	Healdsburg-Municipal Airport	0.055	0.062	0.059	0.058

Note: Blank cells indicate incomplete or no data available; therefore, a design value cannot be calculated.

Air District	County	AQS ID	Site Name	Year			2015 Design Value (ppm)
				2013 4 <sup>th</sup> High (ppm)	2014 4 <sup>th</sup> High (ppm)	2015 4 <sup>th</sup> High (ppm)	
Placer County APCD	Placer	060610003	Auburn-11645 Atwood Road	0.073	0.081	0.085	0.079
		060610004	Colfax-City Hall	0.071	0.073	0.075	0.073
		060610006	Roseville-N Sunrise Blvd	0.075	0.083	0.073	0.077
		060611004	Tahoe City-221 Fairway Drive		0.062	0.066	N/A
		060612002	Lincoln-1445 1st Street	0.066	0.070	0.071	0.069
Sacramento Metropolitan AQMD	Sacramento	060670002	North Highlands-Blackfoot Way	0.072	0.075	0.075	0.074
		060670006	Sacramento-Del Paso Manor	0.075	0.075	0.079	0.076
		060670010	Sacramento-T Street	0.063	0.070	0.071	0.068
		060670011	Elk Grove-Bruceville Road	0.062	0.069	0.069	0.066
		060670012	Folsom-Natoma Street	0.079	0.081	0.081	0.080
		060670014	Sacramento-Goldenland Court	0.068	0.070	0.071	0.069
		060675003	Sloughhouse	0.073	0.076	0.079	0.076
San Diego County APCD	San Diego	060730003	El Cajon-Redwood Ave.	0.068	0.048		N/A
		060730001	Chula Vista	0.059	0.063	0.061	0.061
		060731001	Del Mar-Mira Costa College	0.062	0.073	0.064	0.066
		060731002	Escondido-E Valley Parkway	0.072	0.076	0.069	0.072
		060731006	Alpine-Victoria Drive	0.078	0.080	0.079	0.079
		060731008	Camp Pendleton	0.062	0.071	0.068	0.067
		060731010	San Diego-1110 Beardsley Street	0.052	0.068	0.061	0.060
		060731014	Otay Mesa-Donovan		0.063	0.069	N/A
		060731016	San Diego-Kearny Villa Road	0.066	0.071	0.067	0.068
		060731018	El Cajon-Floyd Smith Drive		0.067	0.065	N/A
			El Cajon-Combined	0.068	0.067	0.065	0.066
		060732007	Otay Mesa-Paseo International	0.059	0.049		N/A
	Otay Mesa-Combined	0.059	0.063	0.069	0.063		
San Joaquin Valley APCD	Fresno	060190007	Fresno-Drummond Street	0.086	0.084	0.088	0.086
		060190011	Fresno-Garland	0.084	0.090	0.087	0.087
		060190242	Fresno-Sierra Skypark #2	0.085	0.091	0.084	0.086
		060192009	Tranquility-32650 West Adams Avenue	0.075	0.075	0.077	0.075
		060194001	Parlier	0.095	0.087	0.093	0.091
		060195001	Clovis-N Villa Avenue	0.091	0.097	0.093	0.093
	Kern	060290007	Edison	0.079	0.085	0.090	0.084
		060290008	Maricopa-Stanislaus Street	0.078	0.078	0.083	0.079
		060290014	Bakersfield-5558 California Avenue	0.084	0.084	0.088	0.085
		060290232	Oildale-3311 Manor Street	0.078	0.078	0.082	0.079
		060292012	Bakersfield-Municipal Airport	0.087	0.087	0.097	0.090
		060295002	Arvin-Di Giorgio	0.087	0.088	0.087	0.087
	Kings	060311004	Hanford-S Irwin Street	0.079	0.081	0.082	0.080
		0.085	0.086	0.085	0.085		

Note: Blank cells indicate incomplete or no data available; therefore, a design value cannot be calculated.

Air District	County	AQS ID	Site Name	Year			2015 Design Value (ppm)
				2013 4 <sup>th</sup> High (ppm)	2014 4 <sup>th</sup> High (ppm)	2015 4 <sup>th</sup> High (ppm)	
San Joaquin Valley APCD (continued)	Madera	060390004	Madera-Pump Yard	0.079	0.088	0.080	0.082
		060392010	Madera-28261 Avenue 14	0.085	0.082	0.083	0.083
	Merced	060470003	Merced-S Coffee Avenue	0.083	0.082	0.083	0.082
	San Joaquin	060771002	Stockton-Hazelton Street	0.064	0.071	0.069	0.068
		060773005	Tracy-Airport	0.073	0.080	0.077	0.076
	Stanislaus	060990005	Modesto-14th Street	0.075	0.081	0.083	0.079
		060990006	Turlock-S Minaret Street	0.080	0.081	0.085	0.082
	Tulare	061070006	Sequoia Natl Park-Lower Kaweah	0.087	0.084	0.083	0.084
		061070009	Sequoia and Kings Canyon Natl Park	0.090	0.089	0.088	0.089
		061072002	Visalia-N Church Street	0.074	0.078	0.087	0.079
061072010		Porterville-1839 Newcomb Street	0.084	0.073	0.086	0.081	
San Luis Obispo County APCD	San Luis Obispo	060790005	Paso Robles-Santa Fe Avenue	0.061	0.058	0.065	0.061
		060792006	San Luis Obispo-3220 South Higuera St	0.050	0.062	0.057	0.056
		060793001	Morro Bay	0.050	0.060	0.052	0.054
		060794002	Nipomo-Regional Park	0.056	0.066	0.060	0.060
		060798001	Atascadero-Lewis Avenue	0.059	0.063		N/A
		060798002	Atascadero-Lift Station #5			0.064	N/A
			Atascadero-Combined	0.059	0.063	0.064	0.062
		060798005	Red Hills	0.074	0.073	0.072	0.073
060798006	Carrizo Plains School	0.067	0.068	0.068	0.067		
Santa Barbara County APCD	Santa Barbara	060830008	El Capitan Beach	0.057	0.065	0.057	0.059
		060830011	Santa Barbara-700 East Canon Perdido	0.055	0.066	0.061	0.060
		060831008	Santa Maria-906 S Broadway	0.048	0.058	0.053	0.053
		060831013	Lompoc-HSandP	0.062	0.068	0.059	0.063
		060831014	Paradise Road-Los Padres National Forest	0.065	0.065	0.063	0.064
		060831018	Gaviota-GTC Site B	0.056	0.064	0.060	0.060
		060831021	Carpinteria-Gobernador Road	0.065	0.076	0.060	0.067
		060831025	Las Flores Canyon #1	0.059	0.070	0.067	0.065
		060832004	Lompoc-S H Street	0.054	0.063	0.053	0.056
		060832011	Goleta-Fairview	0.059	0.069	0.061	0.063
		060833001	Santa Ynez-Airport Road	0.057	0.063	0.062	0.060
		060834003	Vandenberg Air Force Base-STS Power	0.058	0.069	0.056	0.061
Shasta County AQMD	Shasta	060890004	Redding-Health Dept Roof	0.050	0.072	0.066	0.062
		060890007	Anderson-North Street	0.064	0.071	0.068	0.067
		060890009	Shasta Lake-13791 Lake Blvd	0.068	0.057	0.072	0.065
		060893003	Lassen Volcanic Natl Park-Manzanita Lake	0.068	0.065	0.066	0.066

Note: Blank cells indicate incomplete or no data available; therefore, a design value cannot be calculated.

Air District	County	AQS ID	Site Name	Year			2015 Design Value (ppm)
				2013 4 <sup>th</sup> High (ppm)	2014 4 <sup>th</sup> High (ppm)	2015 4 <sup>th</sup> High (ppm)	
Siskiyou County APCD	Siskiyou	060932001	Yreka-Foothill Drive	0.063	0.061	0.061	0.061
South Coast AQMD	Los Angeles	060370002	Azusa	0.080	0.081	0.088	0.083
		060370016	Glendora-Laurel	0.088	0.096	0.095	0.093
		060370113	West Los Angeles-VA Hospital	0.059	0.077	0.069	0.068
		060371103	Los Angeles-North Main Street	0.060	0.072	0.072	0.068
		060371201	Reseda	0.084	0.083	0.087	0.084
		060371302	Compton-700 North Bullis Road	0.063	0.073	0.065	0.067
		060371602	Pico Rivera-4144 San Gabriel	0.070	0.079	0.075	0.074
		060371701	Pomona	0.085	0.090	0.094	0.089
		060372005	Pasadena-S Wilson Avenue	0.070	0.086	0.082	0.079
		060374006	Long Beach-2425 Webster Street	0.057	0.061	0.056	0.058
		060375005	Los Angeles-Westchester Parkway	0.060	0.075	0.069	0.068
		060376012	Santa Clarita	0.094	0.097	0.091	0.094
	Orange	060590007	Anaheim-Pampas Lane	0.063	0.076	0.065	0.068
		060591003	Costa Mesa-Mesa Verde Drive	0.065	0.076	0.068	0.069
		060592022	Mission Viejo-26081 Via Pera	0.074	0.078	0.075	0.075
		060595001	La Habra	0.066	0.075	0.073	0.071
	Riverside	060650008	Joshua Tree National Park-Cottonwood	0.077	0.091	0.074	0.080
		060650012	Banning Airport	0.091	0.094	0.091	0.092
		060650016	Winchester-33700 Borel Road	0.074	0.077	0.079	0.076
		060652002	Indio-Jackson Street	0.085	0.084	0.079	0.082
		060655001	Palm Springs-Fire Station	0.090	0.089	0.086	0.088
		060656001	Perris	0.088	0.089	0.094	0.090
		060658001	Riverside-Rubidoux	0.094	0.091	0.096	0.093
060658005		Mira Loma Van Buren	0.092	0.087	0.093	0.090	
060659001	Lake Elsinore-W Flint Street	0.081	0.079	0.093	0.084		
San Bernardino	060710005	Crestline	0.099	0.102	0.107	0.102	
	060711004	Upland	0.095	0.093	0.101	0.096	
	060712002	Fontana-Arrow Highway	0.100	0.093	0.100	0.097	
	060714003	Redlands-Dearborn	0.104	0.099	0.102	0.101	
	060719004	San Bernardino-4th Street	0.097	0.095	0.105	0.099	
Tehama County APCD	Tehama	061030004	Tuscan Butte	0.072	0.076	0.076	0.074
		061030005	Red Bluff-Oak Street	0.072	0.068		N/A
		061030007	Red Bluff-1834 Walnut Street			0.063	N/A
			Red Bluff-Merged	0.072	0.068	0.063	0.067
Tuolumne County APCD	Tuolumne	061090005	Sonora-Barretta Street	0.070	0.075	0.076	0.073

Note: Blank cells indicate incomplete or no data available; therefore, a design value cannot be calculated.

Air District	County	AQS ID	Site Name	Year			2015 Design Value (ppm)
				2013 4 <sup>th</sup> High (ppm)	2014 4 <sup>th</sup> High (ppm)	2015 4 <sup>th</sup> High (ppm)	
Ventura County APCD	Ventura	061110007	Thousand Oaks-Moorpark Road	0.062	0.074	0.066	0.067
		061110009	Piru-3301 Pacific Avenue	0.069	0.079	0.072	0.073
		061111004	Ojai-Ojai Avenue	0.072	0.077	0.072	0.073
		061112002	Simi Valley-Cochran Street	0.077	0.081	0.074	0.077
		061113001	El Rio-Rio Mesa School #2	0.059	0.067	0.060	0.062
Yolo-Solano AQMD	Solano	060953003	Vacaville-Ulatis Drive	0.064	0.066	0.068	0.066
	Yolo	061130004	Davis-UCD Campus	0.058	0.065	0.065	0.062
		061131003	Woodland-Gibson Road	0.065	0.066	0.070	0.067

<sup>1</sup> Daily maximum 8-hour average ozone concentrations for 2013 through 2015 were determined using the new method specified for the 0.070 ppm federal ozone standard, which excludes the 8-hour average concentrations calculated each day for hours 00 through 06. The fourth highest concentrations and design values shown in the table above account for this change in method.

Note: Blank cells indicate incomplete or no data available; therefore, a design value cannot be calculated.

**Enclosure 5**

**Board Resolution**

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State of California  
AIR RESOURCES BOARD

**OZONE DESIGNATION RECOMMENDATIONS FOR THE REVISED NATIONAL  
OZONE STANDARD OF 70 PARTS PER BILLION**

Resolution 16-11

**September 22, 2016**

Agenda Item No.: 16-8-1

WHEREAS, the Legislature in Health and Safety Code section 39602 has designated the State Air Resources Board (ARB or Board) as the air pollution control agency for all purposes set forth in federal law;

WHEREAS, section 109(b)(1) of the Clean Air Act requires the United States Environmental Protection Agency (U.S. EPA) to set primary air quality standards at levels that protect public health with an adequate margin of safety;

WHEREAS, section 109(b)(2) of the Clean Air Act requires U.S. EPA to set secondary air quality standards at levels requisite to protect public welfare;

WHEREAS, on October 1, 2015, the U.S. EPA promulgated a revised primary eight-hour ozone standard and an identical secondary eight-hour ozone standard at a level of 0.070 parts per million, based on the need to protect against daylong exposures to lower levels of ozone;

WHEREAS, section 107(d)(1)(A) of the Clean Air Act requires states to submit to U.S. EPA a list designating areas as nonattainment, attainment, or unclassifiable for a new or revised national ambient air quality standard (NAAQS) no later than one year after the promulgation of the standard and requires U.S. EPA to finalize the designations within two years of the promulgation of the new or revised standard;

WHEREAS, section 107(d)(1)(A)(i) of the Clean Air Act provides that any area that does not meet, or that contributes to ambient air quality in a nearby area that does not meet, the NAAQS for a pollutant shall be designated nonattainment;

WHEREAS, section 107(d)(1)(A)(ii) of the Clean Air Act also provides that any area (other than an area identified as nonattainment under section 107(d)(1)(A)(i)) that meets the NAAQS for the pollutant shall be designated attainment;

WHEREAS, section 107(d)(1)(A)(iii) of the Clean Air Act provides that any area that cannot be classified on the basis of available information as meeting or not meeting the NAAQS for the pollutant shall be designated unclassifiable;

WHEREAS, ARB has developed recommendations for area designations and boundaries in consultation with local air districts and U.S. EPA;

WHEREAS, a Staff Report titled *Recommended Area Designations for the 0.070 ppm Federal 8-hour Ozone Standard* which lists recommendations for area designations and nonattainment area boundaries for the federal 0.070 ppm eight-hour average ozone standard has been prepared;

WHEREAS, Attachment A to this Resolution lists recommendations for nonattainment, attainment, and unclassifiable area designations and boundaries for each area for the 0.070 ppm federal eight-hour average ozone standard;

WHEREAS, the recommendations are based on ozone data from 2013 to 2015, the most recent data available;

WHEREAS, U.S. EPA will base the final designations on ozone data from 2014 to 2016;

WHEREAS, ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans has been certified by the Secretary for Natural Resources under Public Resources Code section 21080.5 of the California Environmental Quality Act (CEQA; California Code of Regulations, title 14, section 15251(d)), and ARB conducts its CEQA review according to this certified program (California Code of Regulations, title 17, sections 60000-60007);

WHEREAS, staff has determined that the proposed recommendations are exempt from CEQA under California Code of Regulations, title 14, section 15061(b)(3) ("common sense" exemption) and section 15308 ("Class 8" exemption: Actions Taken by Regulatory Agencies for Protection of the Environment) because the record evidence shows with certainty that the proposed recommendations will enhance the environment by better protecting the public from health impacts associated with exposure to ozone, and there is no possibility that the proposed activity may result in a significant adverse impact on the environment, as described in Chapter 6 of the Staff Report;

NOW, THEREFORE, BE IT RESOLVED that the Board directs the Executive Officer to forward the recommended area designations and nonattainment boundaries for the federal 0.070 ppm eight-hour average ozone standard to U.S. EPA and to work with U.S. EPA to resolve any issues that may arise regarding the recommendations.

I hereby certify that the above is a true and correct copy of Resolution 16-11 as adopted by the Air Resources Board.

  
\_\_\_\_\_  
Tracy Jensen, Clerk of the Board

Resolution 16-11

September 22, 2016

**Attachment A:** Recommended Nonattainment, Attainment and Unclassifiable Designations for the 0.070 parts per million Federal 8-Hour Ozone Standard

**Recommended Nonattainment, Attainment and Unclassifiable Designations for  
the 0.070 parts per million Federal 8-Hour Ozone Standard**

<b>Designation Area</b>	<b>Description</b>	<b>Recommended Designation</b>
Amador County	Amador County	Nonattainment
Calaveras County	Calaveras County	Nonattainment
Chico (Butte County)	Butte County	Nonattainment
Imperial County	Imperial County	Nonattainment
Kern County (Eastern Kern)	Eastern half of Kern County within the Mojave Desert Air Basin portion (excluding Indian Wells Valley)	Nonattainment
Los Angeles-San Bernardino Counties (Western Mojave Desert)	Northeastern Los Angeles County and central San Bernardino County	Nonattainment
Los Angeles-South Coast Air Basin	Orange County; western Los Angeles County (including Catalina and San Clemente Islands); western Riverside County; and southwestern San Bernardino County	Nonattainment
Mariposa County	Mariposa County	Nonattainment
Nevada County (Western portion)	Portion of Nevada County west of the crest of the Sierra Nevada Mountains	Nonattainment
Riverside County (Coachella Valley)	Central Riverside County	Nonattainment
Sacramento Metropolitan Area	Sacramento and Yolo counties; eastern Solano County; southern Sutter County; and portions of Placer and El Dorado counties west of the crest of the Sierra Nevada Mountains	Nonattainment
San Diego County	San Diego County	Nonattainment
San Francisco Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara counties; southern Sonoma County; and western Solano County	Nonattainment
San Joaquin Valley	Fresno, Madera, Merced, San Joaquin Stanislaus, and Tulare counties and the western portion of Kern County within the San Joaquin Valley Air Basin	Nonattainment
San Luis Obispo (Eastern San Luis Obispo County)	Eastern portion of San Luis Obispo County	Nonattainment
Sutter Buttes	Sutter Buttes in Sutter County above 2,000 feet	Nonattainment
Tuolumne County	Tuolumne County	Nonattainment
Tuscan Buttes	Tuscan Buttes in Tehama County above 1,800 feet	Nonattainment
Ventura County	Continental portion of Ventura County	Nonattainment

<b>Designation Area</b>	<b>Description</b>	<b>Recommended Designation</b>
Colusa County	Colusa County	Attainment
Eastern Riverside County	Eastern portion of Riverside County within the Mojave Desert Air Basin	Attainment
Glenn County	Glenn County	Attainment
Inyo County	Inyo County	Attainment
Lake County	Lake County	Attainment
North Central Coast Air Basin	Monterey, Santa Cruz, and San Benito counties	Attainment
North Coast Air Basin	Del Norte, Humboldt, Mendocino, and Trinity counties and North Coast Air Basin portion of Sonoma County	Attainment
Northeast Plateau Air Basin	Lassen, Modoc and Siskiyou counties	Attainment
Northeast San Bernardino County	Northern and eastern portions of San Bernardino County within the Mojave Desert Air Basin	Attainment
Santa Barbara County	Continental portion of Santa Barbara County	Attainment
Shasta County	Shasta County	Attainment
Sutter and Yuba Counties	Yuba County and portion of Sutter County outside of Sacramento Metropolitan and Sutter Buttes nonattainment areas	Attainment
Tehama County	Portion of Tehama County outside of the Tuscan Buttes nonattainment area	Attainment
Western San Luis Obispo County	Portion of San Luis Obispo County to the west of the Eastern San Luis Obispo County nonattainment area	Attainment
Eastern Nevada County	Portion of Nevada County east of the crest of the Sierra Nevada Mountains	Unclassifiable
Lake Tahoe Air Basin	Eastern portion of Placer and El Dorado counties within the Lake Tahoe Air Basin	Unclassifiable
Northeastern Kern County	Portion of Kern County within the Indian Wells Valley	Unclassifiable
Northern Channel Islands	The Channel Islands located in the South Central Coast Air Basin: Anacapa, San Miguel, San Nicholas, Santa Barbara, Santa Cruz and Santa Rosa islands	Unclassifiable
Northern Great Basin Valleys Air Basin	Alpine and Mono counties	Unclassifiable
Northern Mountain Counties	Plumas and Sierra counties	Unclassifiable

# Area Designations for State Ambient Air Quality Standards

## OZONE





You are here: EPA Home > Green Book > 8-Hour Ozone (2015) Designated Area/State Information with Design Values

## 8-Hour Ozone (2015) Designated Area/State Information with Design Values

Data is current as of October 31, 2018

Design Values in ppm. "Current Design Values" are current as of the posted Green Book date. Check the Air Quality Design Value site for design value updates.

Display:  Nonattainment and Maintenance Areas  Nonattainment Areas  Maintenance Areas

<i>Click underlined column heading to change report order</i>				<b>Design Values at the Time of Designation</b>					
<u>Area Name ▲</u>	<u>State</u>	<u>Current Status</u>	<u>Current Classification or at Redesignation</u>	<u>Design Values</u>	<u>Monitoring Years</u>	<u>Meets NAAQS Determin. 1</u>	<u>No. Ctys</u>	<u>2010 Population</u>	<u>EPA Region</u>
<a href="#">click area name for state/county list</a>			<a href="#">click for classification history</a>						
Allegan County, MI	MI	Nonattainment	Marginal	0.075	2014-2016	No	1	46,615	05
Amador County, CA	CA	Nonattainment	Marginal	0.073	2014-2016	No	1	38,091	09
Atlanta, GA	GA	Nonattainment	Marginal	0.075	2014-2016	No	7	3,669,376	04
Baltimore, MD	MD	Nonattainment	Marginal	0.073	2014-2016	No	6	2,662,691	03
Berrien County, MI	MI	Nonattainment	Marginal	0.074	2014-2016	No	1	156,813	05
Butte County, CA	CA	Nonattainment	Marginal	0.075	2014-2016	No	1	220,000	09
Calaveras County, CA	CA	Nonattainment	Marginal	0.076	2014-2016	No	1	45,578	09
Chicago, IL-IN-WI	IL	Nonattainment	Marginal	0.077	2014-2016	No	7	8,076,475	05
Chicago, IL-IN-WI	IN	Nonattainment	Marginal	0.077	2014-2016	No	1	421,162	05
Chicago, IL-IN-WI	WI	Nonattainment	Marginal	0.077	2014-2016	No	1	116,383	05
Cincinnati, OH-KY	KY	Nonattainment	Marginal	0.072	2014-2016	No	3	347,968	04
Cincinnati, OH-KY	OH	Nonattainment	Marginal	0.072	2014-2016	No	4	1,580,560	05
Cleveland, OH	OH	Nonattainment	Marginal	0.075	2014-2016	No	7	2,780,440	05
Columbus, OH	OH	Nonattainment	Marginal	0.071	2014-2016	No	4	1,650,276	05
Dallas-Fort Worth, TX	TX	Nonattainment	Marginal	0.08	2014-2016	No	9	6,202,076	06
Denver Metro/North Front Range, CO	CO	Nonattainment	Marginal	0.08	2014-2016	No	9	3,329,773	08
Detroit, MI	MI	Nonattainment	Marginal	0.073	2014-2016	No	7	4,704,743	05
Dona Ana County (Sunland Park Area), NM	NM	Nonattainment	Marginal	0.072	2014-2016	No	1	12,675	06
Door County, WI	WI	Nonattainment	Marginal (Rural Transport)	0.072	2014-2016	No	1	31	05
Greater Connecticut, CT	CT	Nonattainment	Marginal	0.074	2014-2016	No	5	1,629,115	01
Houston-Galveston-Brazoria, TX	TX	Nonattainment	Marginal	0.079	2014-2016	No	6	5,773,151	06
Imperial County, CA	CA	Nonattainment	Marginal	0.076	2014-2016	No	1	174,528	09
Kern County (Eastern Kern), CA	CA	Nonattainment	Moderate	0.084	2014-2016	No	1	95,066	09
Las Vegas, NV	NV	Nonattainment	Marginal	0.074	2014-2016	No	1	1,892,250	09
Los Angeles-San Bernardino Counties (West Mojave Desert), CA	CA	Nonattainment	Severe-15	0.091	2014-2016	No	2	866,960	09
Los Angeles-South Coast Air Basin, CA	CA	Nonattainment	Extreme	0.108	2014-2016	No	4	15,702,771	09
Louisville, KY-IN	IN	Nonattainment	Marginal	0.074	2014-2016	No	2	184,810	05
Louisville, KY-IN	KY	Nonattainment	Marginal	0.074	2014-2016	No	3	875,731	04
						<b>Total Areas</b>	<b>Total Ctys</b>	<b>Total Population (2010)</b>	
<b>Nonattainment</b>						52	201	124,069,378	
<b>Maintenance</b>						0	0	0	
<b>Nonattainment and Maintenance</b>						52	201	124,069,378	

<i>Click underlined column heading to change report order</i>				<b>Design Values at the Time of Designation</b>					
<b>Area Name ▲</b>	<b>State</b>	<b>Current Status</b>	<b>Current Classification or at Redesignation</b>	<b>Design Values</b>	<b>Monitoring Years</b>	<b>Meets NAAQS Determin.1</b>	<b>No. Ctys</b>	<b>2010 Population</b>	<b>EPA Region</b>
<a href="#">click area name for state/county list</a>			<a href="#">click for classification history</a>						
Manitowoc County, WI	WI	Nonattainment	Marginal	0.072	2014-2016	No	1	48,956	05
Mariposa County, CA	CA	Nonattainment	Marginal	0.075	2014-2016	No	1	18,251	09
Morongo Band of Mission Indians, CA	CA	Nonattainment	Serious	0.097	2014-2016	No	1	932	09
Muskegon County, MI	MI	Nonattainment	Marginal	0.075	2014-2016	No	1	146,852	05
Nevada County (Western part), CA	CA	Nonattainment	Moderate	0.083	2014-2016	No	1	82,042	09
New York-Northern New Jersey-Long Island, NY-NJ-CT	CT	Nonattainment	Moderate	0.083	2014-2016	No	3	1,944,982	01
New York-Northern New Jersey-Long Island, NY-NJ-CT	NJ	Nonattainment	Moderate	0.083	2014-2016	No	12	6,003,340	02
New York-Northern New Jersey-Long Island, NY-NJ-CT	NY	Nonattainment	Moderate	0.083	2014-2016	No	9	12,268,815	02
Northern Milwaukee/Ozaukee Shoreline, WI	WI	Nonattainment	Marginal	0.073	2014-2016	No	2	69,817	05
Northern Wasatch Front, UT	UT	Nonattainment	Marginal	0.075	2014-2016	No	4	1,615,574	08
Pechanga Band of Luiseno Mission Indians of the Pechanga Reservation	CA	Nonattainment	Marginal	0.071	2014-2016		2	652	09
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	DE	Nonattainment	Marginal	0.077	2014-2016	No	1	538,479	03
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	MD	Nonattainment	Marginal	0.077	2014-2016	No	1	101,108	03
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	NJ	Nonattainment	Marginal	0.077	2014-2016	No	9	2,788,554	02
Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE	PA	Nonattainment	Marginal	0.077	2014-2016	No	5	4,008,994	03
Phoenix-Mesa, AZ	AZ	Nonattainment	Marginal	0.077	2014-2016	No	3	3,945,140	09
Riverside County (Coachella Valley), CA	CA	Nonattainment	Severe-15	0.087	2014-2016	No	1	425,029	09
Sacramento Metro, CA	CA	Nonattainment	Moderate	0.085	2014-2016	No	6	2,240,448	09
San Antonio, TX	TX	Nonattainment	Marginal	0.074	2015-2017	No	1	1,714,773	06
San Diego County, CA	CA	Nonattainment	Moderate	0.081	2014-2016	No	1	3,077,287	09
San Francisco Bay Area, CA	CA	Nonattainment	Marginal	0.074	2014-2016	No	9	6,969,365	09
						<b>Total Areas</b>	<b>Total Ctys</b>	<b>Total Population (2010)</b>	
<b>Nonattainment</b>						52	201	124,069,378	
<b>Maintenance</b>						0	0	0	
<b>Nonattainment and Maintenance</b>						52	201	124,069,378	

<i>Click underlined column heading to change report order</i>				<b>Design Values at the Time of Designation</b>					
<b>Area Name ▲</b>	<b>State</b>	<b>Current Status</b>	<b>Current Classification or at Redesignation</b>	<b>Design Values</b>	<b>Monitoring Years</b>	<b>Meets NAAQS Determin.<sup>1</sup></b>	<b>No. Ctys</b>	<b>2010 Population</b>	<b>EPA Region</b>
<a href="#">click area name for state/county list</a>			<a href="#">click for classification history</a>						
San Joaquin Valley, CA	CA	Nonattainment	Extreme	0.094	2014-2016	No	8	3,841,897	09
San Luis Obispo (Eastern part), CA	CA	Nonattainment	Marginal	0.073	2014-2016	No	1	1,290	09
Sheboygan County, WI	WI	Nonattainment	Marginal	0.079	2014-2016	No	1	61,656	05
Southern Wasatch Front, UT	UT	Nonattainment	Marginal	0.073	2014-2016	No	1	515,895	08
St. Louis, MO-IL	IL	Nonattainment	Marginal	0.072	2014-2016	No	2	539,338	05
St. Louis, MO-IL	MO	Nonattainment	Marginal	0.072	2014-2016	No	4	1,696,841	07
Sutter Buttes, CA	CA	Nonattainment	Marginal	0.075	2014-2016	No	1	3	09
Tuolumne County, CA	CA	Nonattainment	Marginal	0.079	2014-2016	No	1	55,365	09
Tuscan Buttes, CA	CA	Nonattainment	Marginal (Rural Transport)	0.079	2014-2016	No	1	0	09
Uinta Basin, UT	UT	Nonattainment	Marginal	0.08	2014-2016	No	2	47,317	08
Ventura County, CA	CA	Nonattainment	Serious	0.077	2014-2016	No	1	820,808	09
Washington, DC-MD-VA	DC	Nonattainment	Marginal	0.072	2014-2016	No	1	601,723	03
Washington, DC-MD-VA	MD	Nonattainment	Marginal	0.072	2014-2016	No	5	2,303,870	03
Washington, DC-MD-VA	VA	Nonattainment	Marginal	0.072	2014-2016	No	9	2,230,623	03
Yuma, AZ	AZ	Nonattainment	Marginal	0.074	2014-2016	No	1	87,254	09
						<b>Total Areas</b>	<b>Total Ctys</b>	<b>Total Population (2010)</b>	
<b>Nonattainment</b>						52	201	124,069,378	
<b>Maintenance</b>						0	0	0	
<b>Nonattainment and Maintenance</b>						52	201	124,069,378	

<sup>1</sup> See the Air Quality Design Value site spreadsheet footnotes for information about "Insufficient Data" Meets NAAQS Determinations.

Design Values in ppm. "Current Design Values" are current as of the posted Green Book date. Check the Air Quality Design Value site for design value updates.

County subtotals and grand totals may not equal sum of the counties. Part counties are only counted one time within groupings. Multi-state nonattainment areas are counted in totals as maintenance areas when all states in the area have been redesignated. Multi-state areas are counted only once in area totals.

Discover.  
Connect.  
Ask.

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2018-10-31

# **Attachment A2**

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Airport Hazards

## Airport Hazards (CEST and EA)

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D
References		
<a href="https://www.hudexchange.info/environmental-review/airport-hazards">https://www.hudexchange.info/environmental-review/airport-hazards</a>		

**1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?**

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

Yes → *Continue to Question 2.*

**2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?**

Yes, project is in an APZ → *Continue to Question 3.*

Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

No, project is not within an APZ or RPZ/CZ

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

**3. Is the project in conformance with DOD guidelines for APZ?**

Yes, project is consistent with DOD guidelines without further action.

**Explain how you determined that the project is consistent:**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

Project is not consistent with DOD guidelines, but it has been approved by Certifying Officer or HUD Approving Official.

**Explain approval process:**

**If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

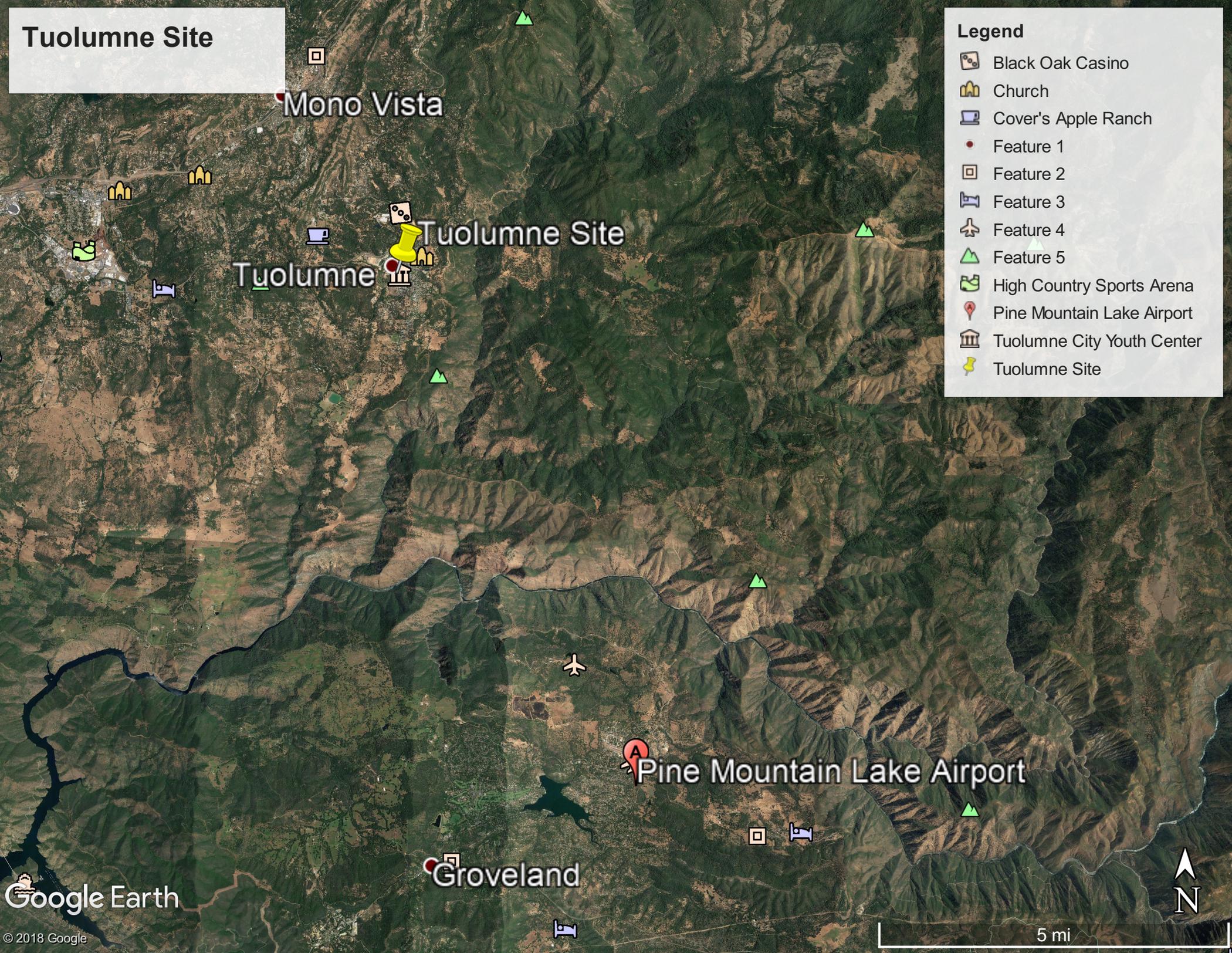
The nearest airport to the project is the Pine Mountain Lake Airport and is located approximately 8 miles south of the project site. The project would be located at a distance far enough from the airstrip that it would not create a unique safety hazard for people residing or working within the project area. See attached map of the project's location in proximity to the Pine Mountain Lake Airport.

**Are formal compliance steps or mitigation required?**

Yes

No

# Tuolumne Site



## Legend

-  Black Oak Casino
-  Church
-  Cover's Apple Ranch
-  Feature 1
-  Feature 2
-  Feature 3
-  Feature 4
-  Feature 5
-  High Country Sports Arena
-  Pine Mountain Lake Airport
-  Tuolumne City Youth Center
-  Tuolumne Site



# **Attachment A3**

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Coastal Barrier and Coastal Zone  
Management Act

## Coastal Barrier Resources (CEST and EA)

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	
References		
<a href="https://www.hudexchange.info/environmental-review/coastal-barrier-resources">https://www.hudexchange.info/environmental-review/coastal-barrier-resources</a>		

Projects located in the following states must complete this form.

Alabama	Georgia	Massachusetts	New Jersey	Puerto Rico	Virgin Islands
Connecticut	Louisiana	Michigan	New York	Rhode Island	Virginia
Delaware	Maine	Minnesota	North Carolina	South Carolina	Wisconsin
Florida	Maryland	Mississippi	Ohio	Texas	

### 1. Is the project located in a CBRS Unit?

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

Yes → *Continue to Question 2.*

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

### 2. Indicate your selected course of action.

After consultation with the FWS the project was given approval to continue  
 → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map and documentation of a FWS approval.*

Project was not given approval  
Project cannot proceed at this location.

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project is located within Tuolumne County, California. See attached map.

**Are formal compliance steps or mitigation required?**

Yes

No

## Coastal Zone Management Act (CEST and EA)

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930
References		
<a href="https://www.onecpd.info/environmental-review/coastal-zone-management">https://www.onecpd.info/environmental-review/coastal-zone-management</a>		

Projects located in the following states must complete this form.

Alabama	Florida	Louisiana	Mississippi	Ohio	Texas
Alaska	Georgia	Maine	New Hampshire	Oregon	Virgin Islands
American Samona	Guam	Maryland	New Jersey	Pennsylvania	Virginia
California	Hawaii	Massachusetts	New York	Puerto Rico	Washington
Connecticut	Illinois	Michigan	North Carolina	Rhode Island	Wisconsin
Delaware	Indiana	Minnesota	Northern Mariana Islands	South Carolina	

### 1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes → Continue to Question 2.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

### 2. Does this project include activities that are subject to state review?

Yes → Continue to Question 3.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

### 3. Has this project been determined to be consistent with the State Coastal Management Program?

Yes, with mitigation. → Continue to Question 4.

Yes, without mitigation. → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

No, project must be canceled.

Project cannot proceed at this location.

**4. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the State Coastal Management Program letter of consistency) and any other documentation used to make your determination.*

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

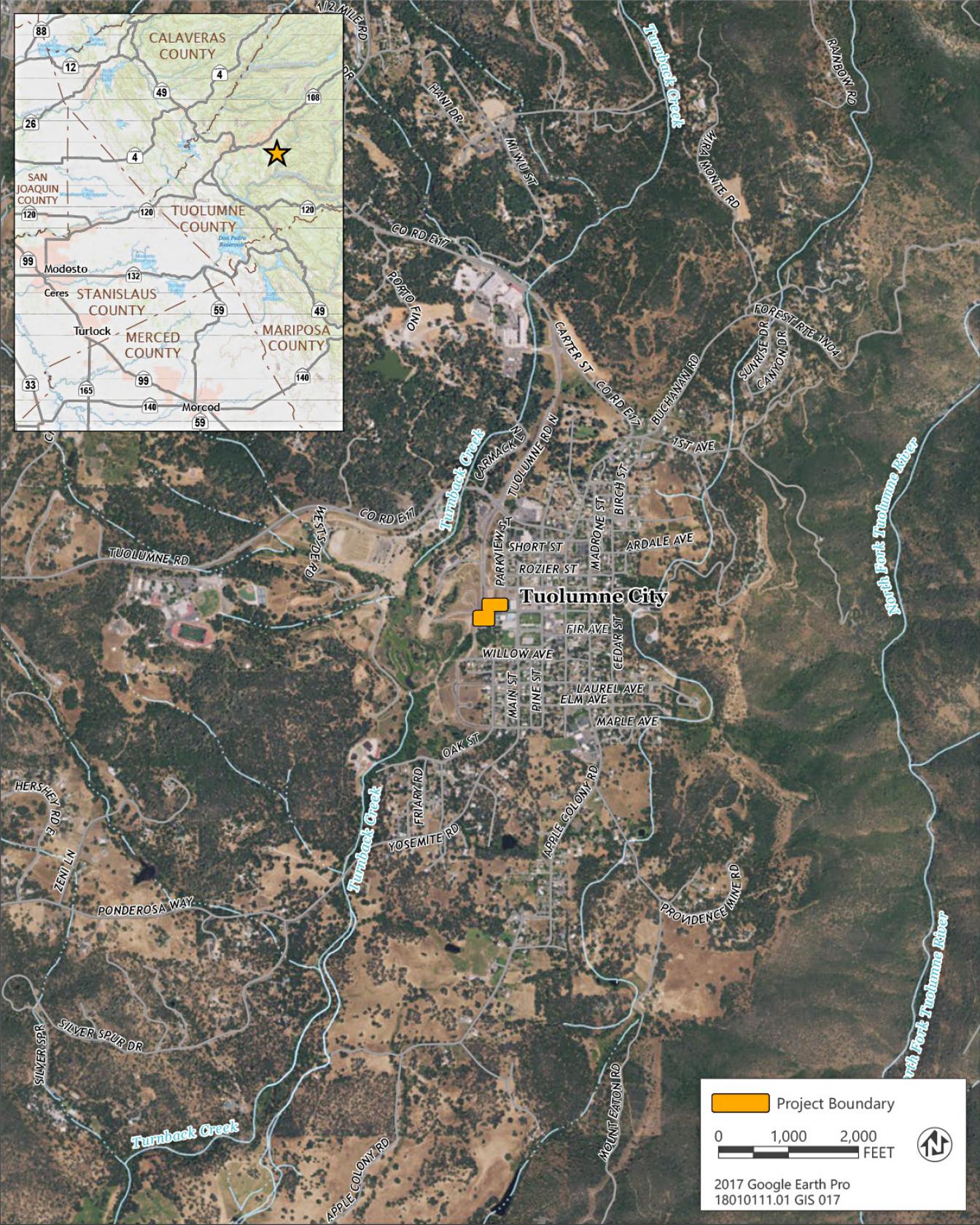
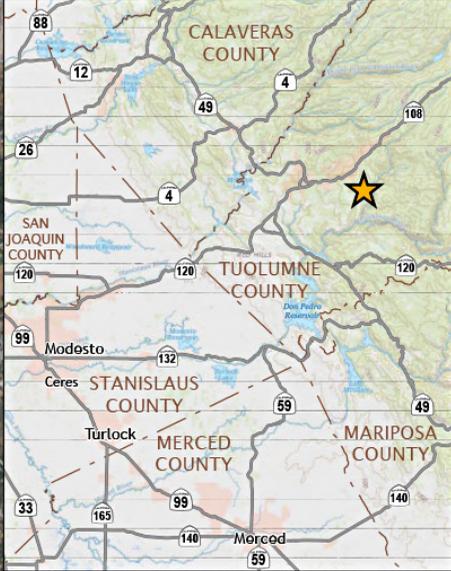
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project location is 125 miles from the coast. See attached map.

**Are formal compliance steps or mitigation required?**

Yes

No



 Project Boundary  
 0 1,000 2,000  
 FEET  
  
 2017 Google Earth Pro  
 18010111.01 GIS 017

# **Attachment A4**

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Endangered Species and Wetlands

## Endangered Species Act (CEST and EA)

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service (“FWS” and “NMFS” or “the Services”).	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i> ); particularly section 7 (16 USC 1536).	50 CFR Part 402
References		
<a href="https://www.hudexchange.info/environmental-review/endangered-species">https://www.hudexchange.info/environmental-review/endangered-species</a>		

### 1. Does the project involve any activities that have the potential to affect species or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.  
 → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes, the activities involved in the project have the potential to affect species and/or habitats. → *Continue to Question 2.*

### 2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#) or you may contact your [local FWS](#) and/or [NMFS](#) offices directly.

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation*

*may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.*

- Yes, there are federally listed species or designated critical habitats present in the action area. → *Continue to Question 3.*

**3. What effects, if any, will your project have on federally listed species or designated critical habitat?**

- No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

- May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ *Continue to Question 4, Informal Consultation.*

- Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ *Continue to Question 5, Formal Consultation.*

**4. Informal Consultation is required**

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

**Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?**

- Yes, the Service(s) concurred with the finding.

→ *Based on the response, the review is in compliance with this section. Continue to Question 6 and provide the following:*

- (1) A biological evaluation or equivalent document*
- (2) Concurrence(s) from FWS and/or NMFS*
- (3) Any other documentation of informal consultation*

*Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.*

No, the Service(s) did not concur with the finding. → Continue to Question 5.

**5. Formal consultation is required**

Section 7 of ESA (16 USC 1536) mandates consultation to resolve potential impacts to federally listed endangered and threatened species and critical habitats. If a HUD assisted project may affect any endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

→ Once consultation is complete, the review is in compliance with this section. Continue to Question 6 and provide the following:

- (1) A biological assessment, evaluation, or equivalent document
- (2) Biological opinion(s) issued by FWS and/or NMFS
- (3) Any other documentation of formal consultation

**6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that will be implemented to mitigate for the impact or effect, including the timeline for implementation.**

Mitigation as follows will be implemented:

No mitigation is necessary.

**Explain why mitigation will not be made here:**

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

**Are formal compliance steps or mitigation required?**

Yes

No

## Wetlands (CEST and EA)

General requirements	Legislation	Regulation
Executive Order 11990 discourages that direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.
<b>References</b>		
<a href="https://www.hudexchange.info/environmental-review/wetlands-protection">https://www.hudexchange.info/environmental-review/wetlands-protection</a>		

**1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?**

The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 2.*

**2. Will the new construction or other ground disturbance impact an on- or off-site wetland?**

The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands.

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.  
→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

→ You must determine that there are no practicable alternatives to wetlands development by completing the 8-Step Process.

Provide a completed 8-Step Process as well as all documents used to make your determination, including a map. Be sure to include the early public notice and the final notice with your documentation.

Continue to Question 3.

- 3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

**Which of the following mitigation actions have been or will be taken? Select all that apply:**

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology through infiltration
- Native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements
- Compensatory mitigation

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

**Are formal compliance steps or mitigation required?**

Yes

No



MAIN ST

BAY AVE

CHERRY VALLEY BLVD

CHERRY LOOP

WESTSIDE DR

Annual Grassland

Project Boundary

0 50 100 FEET



2017 Google Earth Pro  
18010111.01 GIS 019

**Biological Constraints Analysis**  
**for the**  
**Tuolumne County Community Resilience Center Projects**  
**(Tuolumne and Groveland)**

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# ACRONYMS AND ABBREVIATIONS

AG	Agriculture
ASP	Aspen Grove
bop	Blue Oak-bull pine woodland
bow	Blue oak woodland
BRCH	Biological Resources Conservation Handbook
BTF	Big Trees Forest
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
chc	Chamise chaparral
CLF	Cliff
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CVRWQCB	Central Valley Regional Water Quality Control Board
dbh	diameter at breast height
DFW	California Department of Fish and Wildlife
ESA	Endangered Species Act
GAB	Gabbrodioritic soils
jpn	Jeffrey pine
low	Live oak woodland
lpn	Lodgepole pine
mch	Mixed chaparral
mcp	Montane chaparral
mhc	Montane hardwood-conifer
mhw	Montane hardwood
NGS	Native Grasslands
NMFS	National Marine Fisheries Service
NPDES	National Pollution Discharge Elimination System
OGC	Old Growth Coniferous Forest
OGO	Old Growth Oak
PGS	Native Perennial Grasslands
ppn	Ponderosa pine
rfr	Red Fir
scn	Subalpine conifer
SER	Serpentine Soils
smc	Sierran mixed conifer
SWRCB	State Water Resources Control Board
TCWH	Tuolumne County Wildlife Handbook
TPZ	Timberland Production Zone
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
VOW	Valley Oak Woodland
wfr	White fir

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# 1 INTRODUCTION

This report presents the results of a biological constraints analysis for the Tuolumne Resilience Center Project located in Tuolumne and Groveland, California. The Tuolumne site consists of a parcel that would be located northeast of the intersection of Cherry Valley Boulevard and Bay Ave (APN 626702300) and a parcel located south of the intersection of Cherry Valley Boulevard and Bay Ave (APN 626702800) in the Tuolumne USGS 7.5-minute quadrangle (Exhibit 1). The Groveland site would be located on sections of two parcels located west of the intersection of Ferretti Road and Pine Mountain Drive (APNs 660306300 and 660903200) in the Groveland USGS 7.5-minute quadrangle (Exhibit 1). The proposed project would construct and operate Tuolumne County Resilience Centers at both locations. The purpose of this analysis is to identify the potential for sensitive biological resources to occur on the sites and recommend measures to avoid affecting sensitive biological resources.

## 2 METHODS

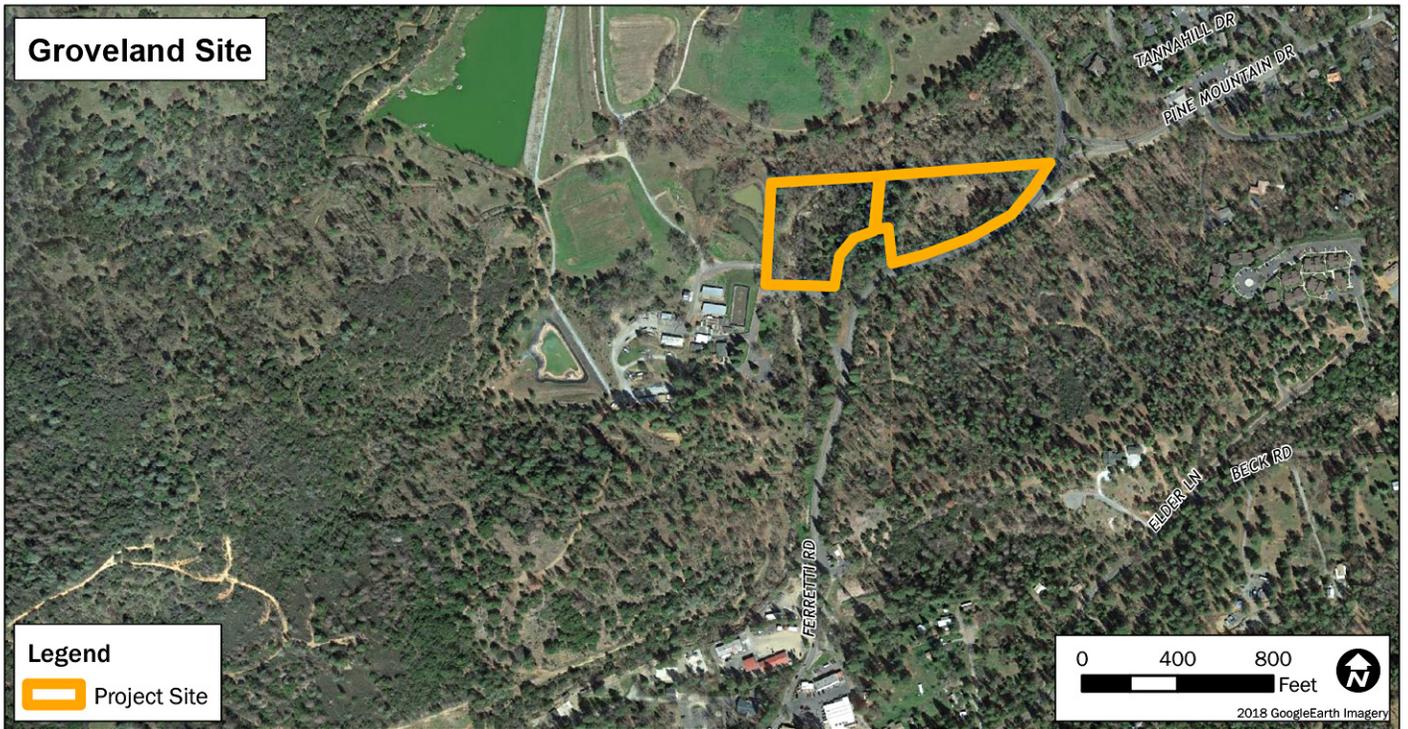
Potential biological constraints were evaluated by Ascent wildlife biologist Carlos Alvarado during a reconnaissance-level survey on the project sites on August 27, 2018. Information on sensitive biological resources previously recorded in the project sites was collected through review of U.S. Fish and Wildlife Service (USFWS) species lists, a search of the California Natural Diversity Database (CNDDDB), and other existing documentation pertaining to biological resources in the region. Resources and data reviewed included the following:

- ▲ CNDDDB record 5-mile search for the project sites California Department of Fish and Wildlife (CNDDDB 2018);
- ▲ USFWS Information for Planning and Consultation (IPaC) automatically generated list of Federal Endangered and Threatened Species that occur in or may occur within the Tuolumne and Groveland sites;
- ▲ USFWS National Wetlands Inventory (<http://www.fws.gov/wetlands/index.html>). Updated June 2018;
- ▲ California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (online edition, v8-03). Accessed on August 23, 2018; and
- ▲ Tuolumne County Wildlife Handbook (Tuolumne County 1987).

Based on the literature review and field site visit, the project sites do not provide suitable habitat for the California red-legged frog (*Rana draytonii*), are outside of the currently known of delta smelt (*Hypomesus traspacificus*) range, and are not within designated critical habitat for any federally listed species; therefore, these species and critical habitat are not discussed further in this report.

Tuolumne County adopted the Tuolumne County Wildlife Handbook (TCWH) in 1987 (Tuolumne County 1987). The TCWH and its associated maps detail the distribution of various habitat types throughout the county, evaluate their relative biological value, and established Tuolumne County's standards and thresholds for evaluating potential effects on biological resources pursuant to CEQA. The wildlife maps also provide some limited species information from local sources. The analysis in this report uses the TCWH as a guideline for evaluating potential impacts pursuant to CEQA. Where the TCWH does not provide guidance, prevailing state and/or federal regulations are used. A draft Biological Resources Review Guide was prepared in 2011 but has not been adopted and is not used in this report.

The TCWH wildlife maps were not immediately available and contain older information, and thus the CalFire's Fire Resources Assessment Program (FRAP), which uses the California Wildlife Habitat Relationship System (CWHR) classifications, were consulted to identify the habitat classification on both sites. FRAP only identified Annual Grassland habitat within the Tuolumne site, and Montane Hardwood and Ponderosa habitats in the Groveland site. Field survey observations were used to refine the habitats presented in Table 1 and Exhibit 2 and Exhibit 3 and follows the CWHR classification system.



Source: Data downloaded from Tuolumne County in 2018

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## 3 REGULATORY SETTING

Biological resources in California are protected and/or regulated by a variety of federal and state laws and policies. Key statutes and regulations applicable to the proposed project are discussed below.

### 3.1 FEDERAL REGULATIONS

#### 3.1.1 Federal Endangered Species Act

Pursuant to the Endangered Species Act (ESA), USFWS and National Marine Fisheries Service (NMFS) have authority over projects that may affect the continued existence of federally listed (threatened or endangered) species. Section 9 of ESA prohibits any person from "taking" an endangered or threatened fish or wildlife species or removing, damaging, or destroying a listed plant species on federal land or where the taking of the plant is prohibited by state law. Take is defined under ESA, in part, as killing, harming, or harassing. Under federal regulations, take is further defined to include habitat modification or degradation where it results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

If a proposed project would result in take of a federally listed species, the project applicant must consult with USFWS or NMFS before the take occurs under Section 10(a) of ESA or Section 7 of ESA if another federal agency is involved in the action. Conservation measures to minimize or compensate for the take are typically required.

#### 3.1.2 Clean Water Act

Section 404 of the Clean Water Act (CWA) requires project proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) before performing any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Many surface waters and wetlands in California meet the criteria for waters of the United States.

In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate regional water quality control board (RWQCB) indicating that the action would uphold state water quality standards.

### 3.2 STATE REGULATIONS

#### 3.2.1 California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA), a permit from the California Department of Fish and Wildlife (DFW) is required for projects that could "take" a species state listed as threatened or endangered. Section 2080 of CESA prohibits take of state listed species. Under CESA, take is defined as any activity that would directly or indirectly kill an individual of a species. The definition does not include "harm" or "harass" like the federal act. As a result, the threshold for take under CESA is higher than under ESA (i.e., habitat modification is not necessarily considered take under CESA). Authorization for take of state-listed

species can be obtained through a California Fish and Game Code Section 2081 incidental take permit. California Fish and Game Code.

The California Fish and Game Code identifies Fully Protected Species in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species and do not provide for authorization of incidental take. DFW has informed nonfederal agencies and private parties that their actions must avoid take of any fully protected species.

In addition, Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (e.g., hawks, owls, eagles, and falcons), including their nests or eggs.

### 3.2.2 California Environmental Quality Act

CEQA applies to projects proposed to be undertaken or requiring approval by state and local governmental agencies. “Projects” are public agency actions with potential to have an impact on the physical environment. Once an activity is determined to be a “project” under CEQA, the lead agency must decide whether it is categorically or statutorily exempt. If it is not exempt, the lead agency must assess the potential for significant environmental effects to occur as a result of the project. For this analysis, thresholds of significance related to biological resources, as described below, are used to determine if a significant impact may occur. The significance criteria are based on applicable parts of Appendix G of the State CEQA Guidelines.

The project would have a significant impact on biological resources if it would:

- ▲ have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the DFW or USFWS;
- ▲ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by DFW or USFWS;
- ▲ have a substantial adverse effect on federally-protected wetlands, as defined by Section 404 of the Clean Water Act, through direct removal, filling, hydrological interruption, or other means;
- ▲ interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- ▲ conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- ▲ conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State conservation plan.

#### California Fish and Game Code Sections 3503 and 3503.5

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs and/or young.

## California Fish and Game Code Section 1602—Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW:

- ▲ substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake; or
- ▲ deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any action that would result in an impact on a river, stream, or lake.

### 3.2.3 Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and each of nine local RWQCBs has jurisdiction over “waters of the State” pursuant to the Porter-Cologne Water Quality Control Act, Water Code Section 13000 et seq., which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, *Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction*). The local RWQCB enforces actions under this general order for isolated waters not subject to federal jurisdiction and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the CWA for waters subject to federal jurisdiction.

### 3.2.4 Oak Woodlands Conservation Act and California Senate Bill 1334/Public Resources Code Section 21083.4

In 2001, the California legislature enacted the Oak Woodlands Conservation Act (Assembly Bill 242), which established requirements for the preservation and protection of oak woodlands and trees, and allocated funding managed by the Wildlife Conservation Board. To qualify to use these funds, counties and cities must adopt an oak conservation management plan. In 2004, to expand these conservation efforts, the legislature passed Senate Bill 1334 (*Oak Woodlands Conservation: Environmental Quality*), which added Section 21083.4 to the Public Resources Code. This statute requires that a county must determine whether a project would result in a significant impact on oak woodlands and, if it is determined that a project may result in a significant impact on oak woodlands, then the County shall require one or more of the following mitigation measures:

- ▲ conserve oak woodlands through the use of conservation easements;
- ▲ plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings;
- ▲ contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements; or

- ▲ other mitigation measures developed by the county.

## 3.3 LOCAL REGULATIONS

### 3.3.1 Tuolumne County General Plan

The existing Tuolumne County General Plan was adopted on December 26, 1996. It has a planning horizon of 25 years. The Conservation and Open Space element contains goals and policies related to the protection of biological resources and water resources relevant to the project.

## BIOLOGICAL RESOURCES

**GOAL 4.J:** Employ a proactive planning approach to conserve biological resources by adopting predictable and consistent evaluation and mitigation standards.

### Policies

- ▲ **4.J.1:** Recognize that agricultural and timberlands of 37 acres or larger provide open areas and habitat for wildlife and that most agricultural and timber management land uses are compatible with the conservation of biological resources.
- ▲ **4.J.2:** Maintain a biological resources conservation program to facilitate a consistent, fair and cost-effective approach to biological resource mitigation and provides for permit streamlining while conserving important biological resources and protecting the private property rights of the individual property owners while fulfilling all State and Federal mandates.
- ▲ **4.J.3:** Recognize that Tuolumne County contains a large percentage of publicly owned lands that provide open space for use by wildlife in formulating a biological resources conservation program for mitigation of impacts associated with discretionary entitlements subject to the California Environmental Quality Act (CEQA) on biological resources.
- ▲ **4.J.4:** Maintain an updated biological resources database to help eliminate redundant and costly biological studies.
- ▲ **4.J.5:** Comply with the "no net loss" policy, and any changes thereto, for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game by requiring new development which is subject to review under the California Environmental Quality Act (CEQA) to achieve "no net loss" of wetland habitat values through avoidance or appropriate mitigation in accordance with the County's Biological Resources Conservation Program referenced in Implementation Program 4.J.a and through the CEQA process.
- ▲ **4.J.6:** Require new development which is subject to review under the California Environmental Quality Act (CEQA) to achieve "no net loss" of habitat values for Valley Oak Woodland (VOW), Serpentine Soils (SER), Old Growth Coniferous Forest (OGC), Big Trees Forest (BTF), Old Growth Oak (OGO), Aspen Grove (ASP), Native Perennial Grasslands (PGS), Native Grasslands (NGS), and Cliff (CLF) habitats through avoidance or appropriate mitigation in accordance with the County's Biological Resources Conservation Program referenced in Implementation Program 4.J.a and through the CEQA process.
- ▲ **4.J.7:** Recognize that wildlife, fish and their habitats are important resources, which are valued by the County's citizens for recreational nature study, hunting and fishing, scientific research, education, shade, beauty, and open space. These resources enhance property value and attract visitors, a major source of revenue for the local economy. [Resolution 41-98 adopted March 24, 1998]

## Implementation Programs

### 4.J.a: Maintain a Biological Resources Conservation Program

Maintain a Biological Resources Conservation Program which requires a land owner and/or applicant requesting a discretionary entitlement subject to the California Environmental Quality Act (CEQA) to mitigate impacts to biological resources in the manner set forth in the Tuolumne County Biological Resources Conservation Handbook (BRCH). This Handbook will be updated periodically as necessary to reflect changes in State and Federal laws or County ordinances. The adoption of the Tuolumne County Biological Conservation Handbook by the Board of Supervisors will supersede the Tuolumne County wildlife Handbook adopted by the Board of supervisors through Resolution 230-96 on December 26, 1996, to serve as the interim biological Resources Conservation Handbook.

The Tuolumne County Biological Resources Conservation Handbook shall be prepared in coordination with the State and Federal agencies having jurisdiction over such resources and the purpose of the Handbook shall be to provide a consistent, fair and cost effective approach to biological resource mitigation and conservation while providing for streamlining of the land use permitting process.

The Tuolumne County Biological Resources Conservation Handbook shall be implemented to mitigate impacts associated with a discretionary entitlement subject to the California Environmental Quality Act (CEQA). The Biological Resources Conservation Handbook shall provide an applicant the same or similar optional methodology for identifying impacts to biological resources and selecting mitigation measures for those impacts as contained in the Tuolumne County Wildlife Handbook. The Biological Resources Conservation Handbook and its associated site evaluations, aerial photographs, Geographic Information System biological resources inventory and database and the biological resources maps shall not be utilized to designate areas as Open Space on the General Plan land use maps. Zoning of land to Open Space to mitigate impacts on biological resources on private property shall only be accomplished in conjunction with a discretionary entitlement subject to CEQA and as agreed to by the property owner and/or applicant of the entitlement who has selected the Biological Resources Conservation Handbook option for such mitigation.

The Tuolumne County Biological Resources Conservation Handbook shall articulate the role and duties of the Planning Department relative to its implementation.

The Tuolumne County Biological Resources Conservation Handbook shall, at a minimum, address: a priority system of evaluating relative values of wildlife habitats on private lands, mitigation measures for listed threatened and endangered species and other special status species; avoidance of Second Priority habitats including setbacks from wetland areas; guidelines for determining the necessity for biological studies for special status species and habitats; mitigation for Third Priority habitats to avoid cumulative adverse impacts to those habitats; mitigation for offsetting impacts to habitats and species including avoidance, conservation easements, mitigation banks, enhancements and restoration of on-site and off-site properties to mitigate on-site impacts.

In formulating the Biological Resources Conservation Handbook, coordinate with the U.S. Fish and Wildlife Service, California Department of Fish and Game and other governmental agencies having jurisdiction over biological resources to develop and implement the following to mitigate cumulative impacts on biological resources:

1. Guidelines for determining when surveys for rare, threatened and endangered species shall be required on private lands in conjunction with land development applications.
2. Inventory and map of Gabbrodioritic soils (GAB), assessment of potential impacts to that habitat type and mitigation program for potential impacts.
3. Map of, and mitigation measures for impacts to, important deer migration corridors through the following Third Priority habitats: Ponderosa pine (ppn), Sierran mixed conifer (smc), Red Fir (rfr),

Lodgepole pine (lpn), White fir (wfr), Subalpine conifer (scn), and Jeffrey pine (jpn) located above 3,000 feet in elevation.

4. Minimum acreage preservation standards for the following third priority habitats: Blue oak woodland (bow), Blue Oak-bull pine woodland (bop), Chamise chaparral (chc), Mixed chaparral (mch), Montane chaparral (mcp), Montane hardwood (mhw), and Montane hardwood-conifer (mhc) and, if so determined by the California Department of Fish and Game, Live oak woodland (low) habitat.
5. Map of the distribution of the Live oak woodland (low) habitat, assessment of impacts to that habitat and mitigation program for potential impacts.
6. Minimum criteria for establishing and/or preserving existing species movement corridors between communities and buffers along riparian corridors to maintain the ability of wildlife to move to and from various habitats.

The Tuolumne County Biological Resources Conservation Handbook shall be updated at least once every five years to reflect new technical information and, if necessary, changes in local resource conditions. [Resolution 261-97 adopted December 2, 1997]

▲ **4.J.b: Recognize Open Space Value of Agricultural and Timber Lands**

Recognize the open space provided by agricultural and timberlands by exempting lands designated on the General Plan land use maps as Timberland Production Zone (TPZ), or Agriculture (AG) when the parcel is 37 acres or larger and supports an agricultural or residential land use or is vacant, from the County's programs for conserving non-targeted biological resources. [Resolution 41-98 adopted March 24, 1998]

▲ **4.J.c: No Net Loss of Wetland Habitat**

Coordinate with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game and any other governmental agency having jurisdiction over wetlands to comply with applicable Federal and State laws concerning "no net loss" of wetland areas. Develop, in coordination with these agencies, programs for mitigating impacts to wetlands that prioritize avoidance, on-site or off-site protection, and existing wetland acquisition higher than creation of new wetlands and include the programs in the County's Biological Resources Conservation Handbook referenced in Implementation Program 4.J.a and coordinate with these agencies at all levels of review of land development applications requiring a discretionary entitlement subject to the California Environmental Quality Act which do not utilize the County's Biological Resources Conservation Handbook to identify appropriate mitigation measures and to address Federal and State wetland laws. [Resolution 41-98 adopted March 24, 1998]

▲ **4.J.d: No Net Loss of Second Priority Habitat Values**

Require new development which is subject to review under the California Environmental Quality Act (CEQA) to achieve "no net loss" of habitat values for Valley Oak Woodland (VOW), Serpentine Soils (SER), Old Growth Coniferous Forest (OGC), Big Trees Forest (BTF), Old Growth Oak (OGO), Aspen Grove (ASP), Native Perennial Grasslands (PGS), Native Grasslands (NGS), and Cliff (CLF) habitats through avoidance or appropriate mitigation in accordance with the County's Biological Resources Conservation Program referenced in Implementation Program 4.J.a and through the CEQA process. Develop, in coordination with Federal and State agencies with jurisdiction over these habitats, programs for mitigating impacts to such habitats for inclusion in the County's Biological Resources Conservation Handbook referenced in Implementation Program 4.J.a and coordinate with these agencies at all levels of review of land development applications requiring a discretionary entitlement subject to the California Environmental Quality Act which do not utilize the County's Biological Resources Conservation Handbook to identify appropriate mitigation measures and to address Federal and State policies relative to these habitats.

▲ **4.J.e: Minimize Conflicts Between Wildlife and Vehicular Traffic**

Work with the California Department of Fish and Game, the California Highway Patrol and other resource and public safety officials to address the impacts associated with, and identify mitigation for, the inherent conflicts between wildlife and roadways.

## **WATER RESOURCES**

**GOAL 4.L:** Conserve the quality and quantity of the County's water resources, while protecting the rights of the land owner.

### **Policies**

- ▲ **4.L.1:** Protect the quality of the County's water resources. Prevent surface water and groundwater contamination by insuring Tuolumne County development standards are adequate to protect water resources. [Resolution 41-98 adopted March 24, 1998]
- ▲ **4.L.2:** Require new urbanization to locate in areas where public water and sewer services are available or can be developed. [Resolution 41-98 adopted March 24, 1998]
- ▲ **4.L.3:** Support the efforts of the local water agencies in identifying and procuring new water resources to meet projected future demands from growth in the County, including the use of reclaimed water for non-potable uses.
- ▲ **4.L.4:** Encourage the conservation of water resources in a systematic manner that is sensitive to the maintenance of water quality, natural capacities, ecological values, and consideration of the many water related needs of the County.
- ▲ **4.L.5:** Require new development to connect to public water and public sewer where harmful areawide impacts to groundwater exist based on known hazard areas. [Resolution 41-98 adopted March 24, 1998]
- ▲ **4.L.6:** Recognize that the decisions made by the County of Tuolumne concerning water resources has an effect on the State of California's ability to meet its water supply needs for all beneficial uses of water, including urban, agricultural, environmental and other uses, such as recreation and power generation and that Tuolumne County has an important stakeholder interest in the success of the State's water management efforts.
- ▲ **4.L.7:** Support the State's efforts to implement the Water Resources and Delta Restoration Clean, Safe, Reliable Water Supply for Cities, Farms, and the Environment Act of 1996 by encouraging water conservation and watershed rehabilitation programs initiated by water agencies, other public agencies and private entities.
- ▲ **4.L.8:** Participate in the State and Federal sponsored CAL-FED program to develop comprehensive and long-term solutions to the problems of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (bay-delta) which is nationally recognized as both an important feature of the State's environment and an important component of the State's water supply system by promoting improved management of watersheds in Tuolumne County to contribute to long- term bay-delta recovery and protection.
- ▲ **4.L.9:** Recognize that clean water is essential to the public health, safety and welfare; fosters economic development and job creation; protects the environment; maintains fish and wildlife; and supports recreation.
- ▲ **4.L.10:** Encourage water resources to be protected from pollution, conserved, and recycled whenever possible to provide for continued economic, community, and social growth.

- ▲ **4.L.11:** Promote improved watershed health and improved water quality and water quantity yields of the watersheds in Tuolumne County.

## Implementation Programs

- ▲ **4.L.a: Develop Conservation Program for Water Resources**

Develop a conservation program for important water resources in conjunction with the County's biological resources conservation program which has been sanctioned by the Federal and State agencies having jurisdiction over such resources to facilitate a consistent, fair and cost-effective approach to water resource mitigation and encourages and supports the restoration of degraded riparian areas through public education programs demonstrating the value of healthy riparian habitats in protecting water quality, and provide for permit streamlining while conserving important water resources. Applicants seeking discretionary entitlements subject to the California Environmental Quality Act shall have the option of using the County's water resource conservation program to mitigate impacts from their projects on such resources or pursue a project specific mitigation program to comply with environmental regulations in effect at that time. They shall also be entitled to mitigation credits for restoration projects in degraded riparian areas as provided in the County's water resources conservation program. Important water resource areas include reservoirs, lakes, ponds, marshes, springs, vernal pools, wetlands, rivers, water supply ditches, and perennial and intermittent streams as identified on the United States Geological Survey (USGS) maps. The water conservation program shall address the following minimum standards:

1. Provision for the continued implementation of the National Pollution Discharge Elimination System (NPDES) permitting program enforced by the Central Valley Regional Water Quality Control Board (CVRWQCB).
2. Maintaining vegetative filters and/or buffers adjacent to water resources to assist in reducing the introduction of sediments and pollutants into surface water resources.
3. Best Management Practices for grading on steep slopes, maintaining sediments on-site, preserving adjacent parcel owner property values by avoiding or reducing substantial runoff over neighboring properties and revegetating and/or terracing on large cut and fill slopes.
4. Flexible development standards for reducing grading, where appropriate.
5. Methods for avoiding and maintaining water resources which are to be avoided during construction and maintained on-site.
6. Assignment of responsibility for the maintenance of sedimentation control facilities on and revegetating graded areas that are abandoned during construction. [Resolution 41-98 adopted March 24, 1998]

- ▲ **4.L.b: Land Uses Adjacent to Public Drinking Water Reservoirs**

Participate in the State Source Water Assessment Program. Amend Tuolumne County Ordinance Codes to provide for local source water protection and wellhead protection programs to protect the sources of drinking water supplies in compliance with the State Source Water Assessment Program. In the interim, require new areas proposed for urban land uses (HDR, MDR, LDR, NC, GC, HC, and MU) and industrial land uses (BP, LI, and HI) on the General Plan maps to avoid being located above public drinking water reservoirs and open (uncovered or un piped) public drinking water conveyances (ditches, flumes, and canals) where discharge or contamination is likely to occur, unless public water and sewer are available or can be developed, or impacts can be mitigated. [Resolution 41-98 adopted March 24, 1998]

- ▲ **4.L.c: Landscaping Standards**

Promote the use of xeriscape landscaping plants and materials to conserve water, the use of water conserving irrigation systems for landscaping, and the use of reclaimed or reuse water for irrigation.

- ▲ **4.L.d: Provide for Graywater Irrigation**  
 Allow the subsurface irrigation of non-food plants from sinks, showers, washing machines, car washing bays and other non-sewage sources, and educate property owners in the proper use of graywater systems.
- ▲ **4.L.e: Consider Regulating Groundwater Exportation**  
 Consider regulating the exportation of groundwater to preserve the County's limited groundwater reserves for use by its residents and businesses.
- ▲ **4.L.f: Require Confirmation of Water Availability for New Development**  
 Continue to require new urban development needing discretionary entitlements to secure a letter from the jurisdictional public water agency stating that the proposed project can be served by that agency and that there is an available water supply.
- ▲ **4.L.g: Require Connection to Public Sewer**  
 Continue to require new urban residential development with a density of three dwelling units per acre, or greater, and commercial development, except that on land designated Special Commercial (SC) by the General Plan, to connect to public sewer.
- ▲ **4.L.h: Require Connection to Public Water**  
 Continue to require all new urban development, except on land designated as Special Commercial (SC) by the General Plan land use maps, to be served with public water.
- ▲ **4.L.i: Create and Update Septic System Hazard Maps**  
 Create and update, as needed, Septic System Hazard Maps indicating areas of high ground water, impervious soils, limestone or other hazards which, either by themselves or in combination, create potentially serious health conditions due to failing septic systems or which are inappropriate for on-site sewage treatment and disposal on an areawide basis.
- ▲ **4.L.j: Address Septic System Hazard Areas**  
 Continue to develop and evaluate criteria to allow development to occur in septic system hazard areas without degrading the water resources.
- ▲ **4.L.k: Provide Grading and Surface Runoff Standards**  
 Provide grading and surface runoff standards necessary to protect water resources in compliance with State and Federal water quality regulations and with the County's water conservation program referenced in Implementation Program 4.L.a.
- ▲ **4.L.l: Expand List of Permitted Uses in Open Space-1 Zoning District**  
 Expand the list of permitted uses in the O-1 (Open Space-1) zoning district in Title 17 of the Tuolumne County Ordinance Code for the conservation and utilization of the County's water resources to include such uses as water monitoring installations excluding wells; improvements to aquatic, plant and wildlife habitat; erosion control projects; and vegetation removal for flood control.
- ▲ **4.L.m: Address Water Supply Sources for Anticipated Growth**  
 Continue to coordinate the County's long range land use planning program with local public water agencies to determine that water supplies and delivery systems can meet the demands of the anticipated new development and population growth of the County. Prepare and maintain a water supply and demand chart summarizing projected water needs based on growth projections and anticipated supply levels from the Tuolumne Utilities District, Tuolumne County Water District #1, Groveland Community Services District, Lake Don Pedro Community Services District and other local public water agencies. In accordance with Section 65352.5 of the California Government Code, the General Plan Land Use Diagrams were formulated in coordination with the applicable urban water plans from these agencies and any amendments to those diagrams shall be reviewed in coordination with the respective public water agency serving the parcel or parcels affected by the proposed amendment.

▲ **4.L.n: Watershed Rehabilitation Projects**

Promote the development of plans for watershed rehabilitation projects which provide for such watershed improvements as:

1. A reduction in the presence of contaminants in drinking water by addressing the origins of the contaminants, including, to the maximum extent practicable, the specific activities that affect the drinking water supply of a community or communities.
2. An increase in the quantity of water available from the watershed.
3. The improvement, restoration, or enhancement of fisheries habitat, including riparian habitat, in and along streams and watercourses in the watershed. These projects may address factors which increase sedimentation in streams and watercourses in the watershed.
4. The improvement of overall forest health, including the reduction of factors which may contribute to the severity of wildfires in the watershed.

▲ **4.L.o: Formulation of Watershed Rehabilitation Plans**

Initiate or assist in the formulation of plans for watershed rehabilitation projects by serving as the coordinating agency for the various stakeholders in such a plan, such as property owners, water agencies, other public agencies, private industry, recreational facility providers and other interested groups and organizations. Provide technical assistance in the development of plans for watershed rehabilitation projects through such means as data sharing.

▲ **4.L.p: Funding for Watershed Improvement**

Submit applications for grants from the CAL-FED and other programs which become available for funding for County initiated or sponsored watershed rehabilitation projects and support the efforts of other public agencies, water agencies, such as the Tuolumne County Water Agency, and other entities in their efforts to seek funding for their respective watershed projects. This support may manifest itself in such ways as adopting a resolution of support or co-sponsoring an application for funding for a watershed project.

▲ **4.L.q: Coordination Among Agencies**

Cooperate and coordinate with Federal, State and local agencies, such as the Tuolumne County Water Agency, in promoting the stewardship of the watersheds within the County. Coordinate with these agencies to avoid duplication of effort and to maximize use of public resources in working towards a common goal of improving the watersheds within Tuolumne County which will, in turn, contribute to the State and Federal objective of providing long-term bay-delta recovery and protection.

### 3.3.2 Tuolumne County Ordinance Code

#### CHAPTER 9.24 PREMATURE REMOVAL OF NATIVE OAK TREES

This ordinance provides protection for premature removal of native oak trees (native to California), oak woodlands, individual valley oaks measuring 5 inches or greater in diameter at breast height (dbh), and/or removal of any old growth oak tree (defined as any native oak tree that is 24 inches or greater in dbh). Premature removal of native oak trees is defined as removal of native oaks tree, oak woodland from a project site within the five (5) years preceding the submittal of an application for a discretionary entitlement from the County of Tuolumne for a land development project on that site.

## CHAPTER 16.24 PARCEL MAPS

### Section 16.24.180 Drainage Easements

- A. Where a land division is traversed by a watercourse, drainageway, channel or stream, there shall be provided a storm water easement or drainage right-of-way fifteen feet in width along the centerline of ephemeral drainages, thirty feet in width along the centerline of intermittent drainages and fifty feet along the centerline of perennial streams conforming substantially to the lines of such watercourse. Wherever safe and feasible, as determined by the director, it is desirable that the drainage be maintained by an open channel with landscaped banks and adequate width for maximum potential volume of flow.
- B. Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within road rights-of-way, perpetual unobstructed easements at least fifteen feet in width for such drainage facilities shall be provided across the subject property outside the road lines and with satisfactory access to the road. Easements shall be indicated and dedicated on the map but shall not be accepted for maintenance by the county. Only those drainageways lying adjacent to or beneath county-maintained roads, and within dedicated road easements, shall be maintained by the county. Drainage easements shall be carried from the road to a natural watercourse or to other drainage facilities.
- C. When a proposed drainage system will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the final map. The applicant shall dedicate a drainage easement along both sides of existing watercourses, of a width to be determined by the director. (Ord. 2864 §24, 2007; Ord. 1562 §2 (part), 1987).

### 3.3.3 Tuolumne County Wildlife Handbook

Tuolumne County adopted the Tuolumne County Wildlife Handbook (TCWH) in 1987 (Tuolumne County, 1987). The TCWH and its associated maps detail the distribution of various habitat types countywide, evaluate their relative biological value, and establish Tuolumne County's standards and thresholds for evaluating the potential biological impacts pursuant to CEQA. The avoidance and mitigation measures provided in the TCWH are intended to facilitate a consistent, fair, and cost-effective approach to wildlife mitigation that provides the greatest protection for the most sensitive resources. The TCWH requires that all first and second priority habitats be avoided and protected through Open Space zoning to minimize potential impacts to these habitats pursuant to CEQA. Per the TCWH, third priority habitats should be included in Open Space only where protection of first and second priority does not already total 20% of the project site.

## 4 EXISTING CONDITIONS AND SITE SURVEY FINDINGS

A site reconnaissance was conducted on August 27, 2018 at each of the project sites. A description of existing conditions that were observed is provided below for each site. In addition, a description of existing vegetation, animal species observed, and water features identified are included.

### 4.1 TUOLUMNE SITE EXISTING CONDITIONS

As mentioned previously, the Tuolumne site consists of two urban parcels across each other along Bay Street in Tuolumne, California. The north parcel is bounded to the north by an undeveloped lot, to the east by sycamore trees and the West Side Lumber Company building, to the south by Bay Street, and to the west by an undeveloped lot. The south parcel is bounded to the north by Bay Street, to the east by a toddler play area and a horseshoe game pit area, to the south by undeveloped riparian area and to the west by Cherry Valley Boulevard South. The two parcels have been historically disturbed. Both parcels have sloped trenches associated with

previous disturbance and installation of storm drainage culverts. Both parcels support annual grassland consisting of mostly ruderal (weedy) vegetation with both parcels supporting similar plant composition (Exhibit 2). (See Attachment 2 - Photo 1 and Photo 2). The south parcel also includes a parking area, which is under construction just south of the Tuolumne City Library and swimming pool.

Observed plants include typical weedy plants associated with disturbed sites: yellow star thistle (*Centaurea solstitialis*), ripgut brome (*Bromus diandrus*), bermuda grass (*Cynodon dactylon*), dogtail grass (*Cynosurus echinatus*), wild oats (*Avena fatua*), wild radish (*Raphanus raphanistrum*), sweet pea (*Lathyrus latifolius*), English plantain (*Plantago lanceolata*), nutsedge (*Cyperus* sp.), curly dock (*Rumex crispus*), Himalayan blackberry (*Rubus armeniacus*), chicory (*Cichorium intybus*), field vetch (*Vicia villosa*). Interior live oak (*Quercus wislizenii*), black oak (*Quercus kelloggii*), pine (*Pinus* sp.), and cypress (*Cupressus* sp.) were observed growing along Bay Street for the north parcel. Only a willow (*Salix* sp.) was observed growing along Bay Street for the south parcel. Approximately eight cottonwood (*Populus* sp.) saplings are also growing within the south parcel adjacent to a depression left by previous ground disturbance north of the riparian area associated with a historical drainage.

The south parcel of the Tuolumne site is located west of a toddler play area and a horseshoe game pit area, which are irrigated. Due to the slope and drain patters, the irrigation drains onto the parcel and has created a seasonal wetland where wetland vegetation such as nutsedge, curly dock, and cocklebur (*Xanthium strumarium*) are growing (See Attachment 2 - Photo 3).

A larger seasonal wetland was also observed within the south parcel. Removal of old railroad tracks, and improper grading resulted in a low spot where cocklebur and cottonwood saplings were observed (See Attachment 2 - Photo 4). The south parcel is bounded to the south by a riparian area associated with a storm drainage area that eventually drains into Turnback Creek.

Wildlife observed in the Tuolumne project site include species associated with urban environments such as feral cat (*Felis silvestris*), house sparrow (*Passer domesticus*), lesser goldfinch (*Spinus psaltria*), house finch (*Carpodacus mexicanus*), California scrub-jay (*Aphelocoma californica*), Anna's hummingbird (*Calypte anna*), western fence lizard (*Sceloporus occidentalis*), and desert cottontail (*Sylvilagus audobonii*).

## 4.2 GROVELAND SITE EXISTING CONDITIONS

The Groveland site also consists of adjacent portions within two parcels that are undeveloped. The parcels are bounded to the north by undeveloped forested land, to the east by Ferretii Road and the Pine Mountain Lake Association, south by Ferretti Road and the driveway to the Groveland Community Service District, and west by the Groveland Community Service District waste water treatment plant evaporation ponds. The west parcel has an intermittent creek that drains into Pine Mountain Lake. The east parcel has an ephemeral drainage that drains into the intermittent creek (Exhibit 3).

The Groveland site supports montane hardwood-conifer habitat and includes foothill pine (*Pinus sabiniana*), ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), black oak, interior live oak, California black walnut (*Juglans californica*), willow (*Salix* sp.), and manzanita (*Arctostaphylos* sp.) (See Attachment 2 - Photo 5). Understory vegetation varies in density and consists of native and weedy species such as ripgut brome, dogtail grass, starthistle, deergrass (*Muhlenbergia rigens*), little rattlesnake grass (*Briza minor*), hairgrass (*Aira caryophyllea*), wild pea, long trefoil (*Acmispon* spp.), woolly mullein (*Verbascum thapsus*), dove weed (*Croton setiger*), poison oak (*Toxicodendron diversilobum*), Himalayan blackberry, vinegar weed (*Trichostema lanceolatum*), tarplant (*Holocarpa virgata*), and navarretia (*Navarretia* sp.).

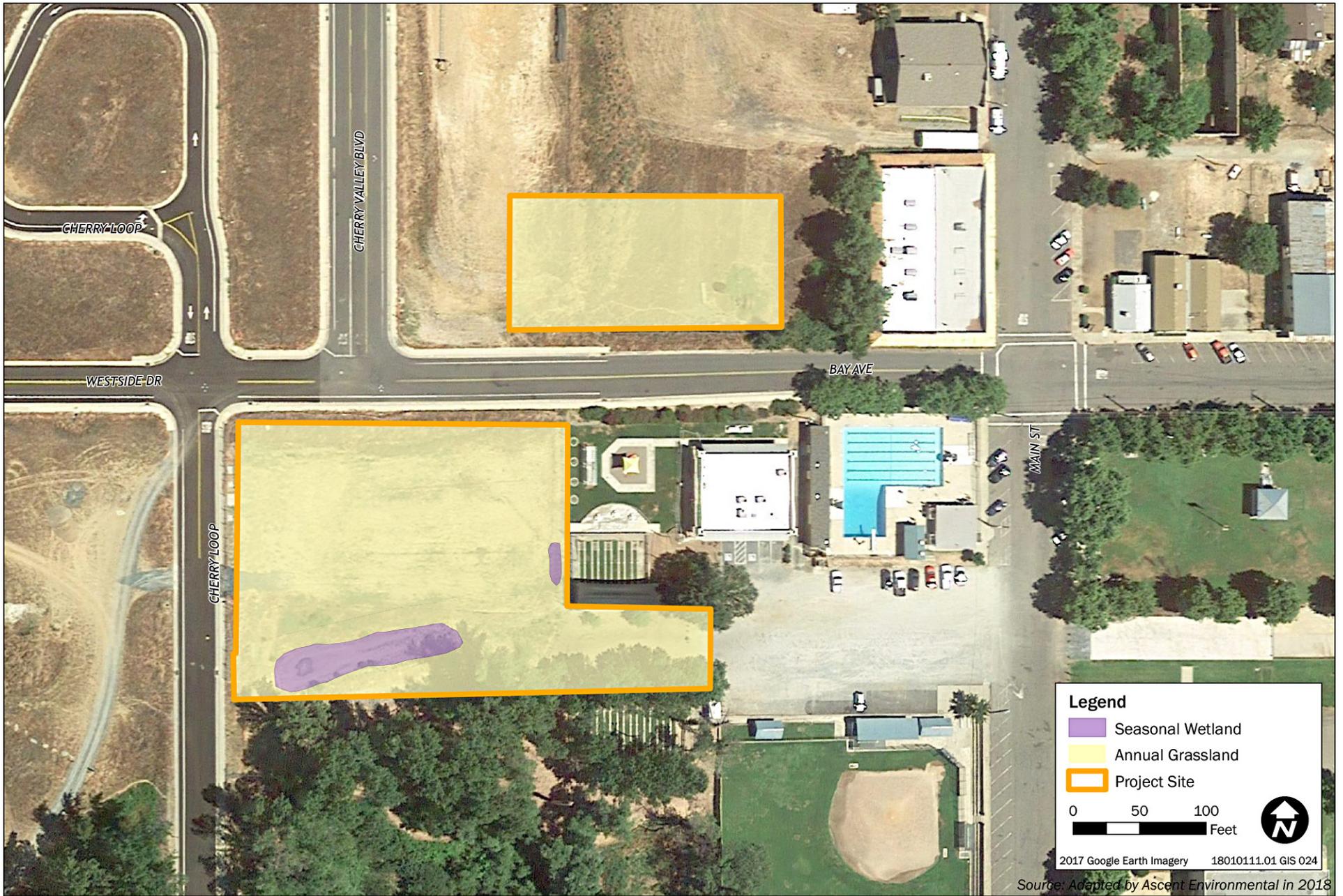
The west parcel supports riparian vegetation associated with the intermittent creek; willows, interior live oak, black oak, California walnut, and incense cedar form the canopy and the understory is composed of blackberry, perennial pepperweed (*Lepidium latifolium*), medusa head grass (*Taeniatherum caput-medusae*), cocklebur, bedstraw, dove weed, curly dock, stinging nettle (*Urtica dioica*), and poison oak.

The east parcel supports an ephemeral drainage that conveys water from the road and the south side of Ferretti Road onto the parcel and eventually drains into the intermittent creek. The ephemeral drainage supports vegetation associated with the montane hardwood-conifer habitat described above and most of the vegetation observed consisted of upland vegetation. Due to scouring experienced during rain events, some root exposure of the oaks and pines has occurred.

Areas of pine trees were recently removed from the Groveland site because of pine bark beetle infestation (Frank, pers. comm., 2018) and thus, the site has openings within the montane hardwood-conifer habitat canopy. The openings are categorized as annual grassland supporting ruderal (weedy) plants (See Attachment 2 - Photo 6). The annual grassland supports ruderal (weedy) species such as ripgut brome, dogtail grass, starthistle, deergrass, little rattlesnake grass, hairgrass, wild pea, long trefoil, woolly mullein, dove weed, poison oak, Himalayan blackberry, vinegar weed, tarplant, and navarretia and it is associated with disturbed areas in both the east and west parcel.

Wildlife observed within the Groveland site include mule deer (*Odocoileus hemionus*), western gray squirrel (*Sciurus griseus*), coyote (*Canis latrans*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), lesser goldfinch, western fence lizard, acorn woodpecker (*Melanerpes formicivorus*), white-breasted nuthatch (*Sitta carolinensis*), bushtit (*Psaltriparus minimus*), California quail (*Callipepla californica*), Steller's jay (*Cyanocitta stelleri*), brown creeper (*Certhia americana*), band-tailed pigeon (*Patagioenas fasciata*), and spotted towhee (*Pipilo maculatus*).

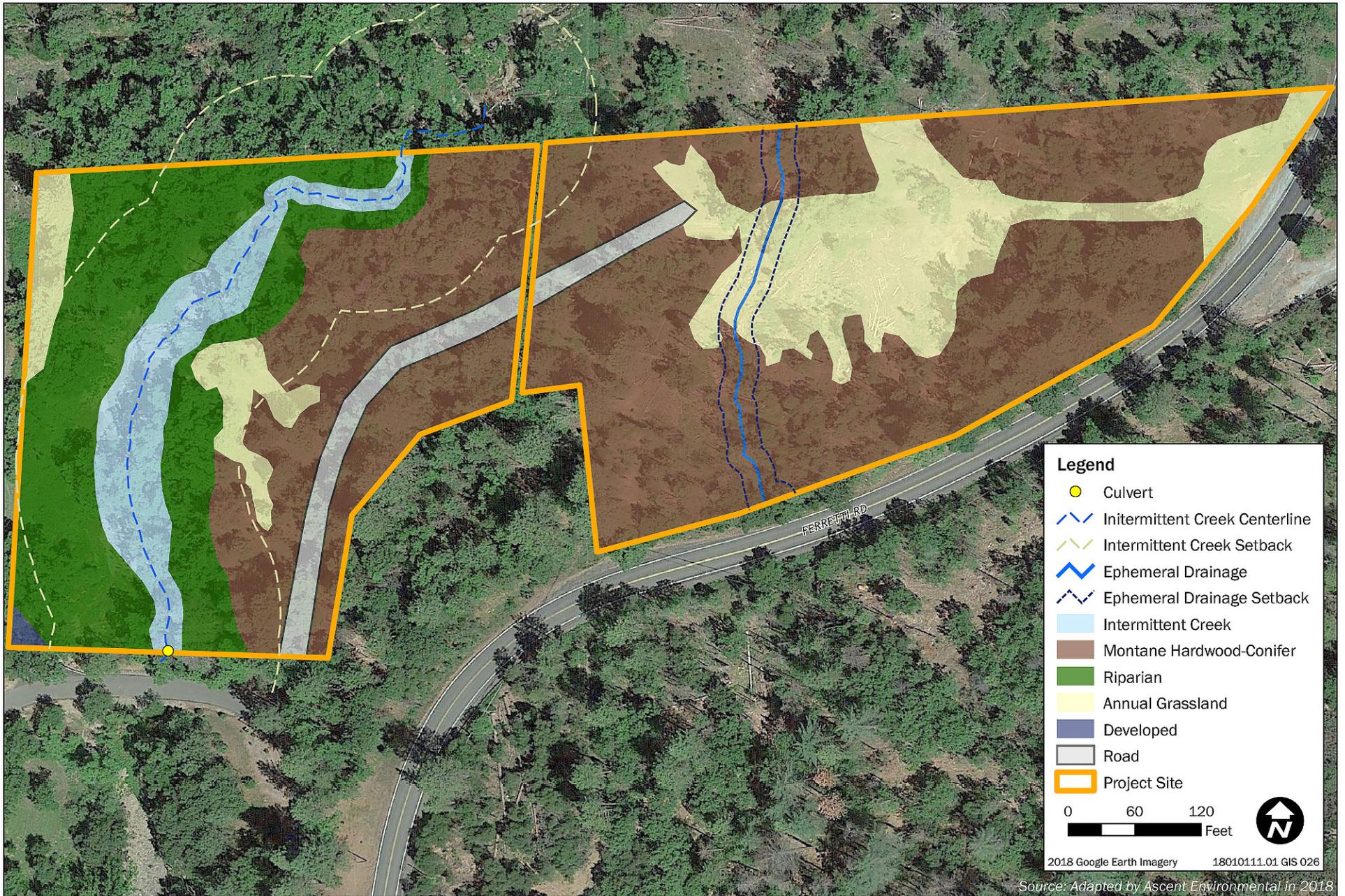
All of the wildlife species observed are common wildlife species expected to occur in urban and semi-rural environments.



**Exhibit 2**

**Tuolumne Site Land Cover**





**Exhibit 3**

**Groveland Site Land Cover**



## 4.3 SPECIAL-STATUS SPECIES

Special-status species are plants and animals in the following categories:

- ▲ listed or proposed for listing as threatened or endangered under federal ESA or candidates for possible future listing;
- ▲ listed or candidates for listing by the State of California as threatened or endangered under CESA;
- ▲ listed as Fully Protected under the California Fish and Game Code;
- ▲ animals identified by DFW as species of special concern;
- ▲ plants considered by DFW to be “rare, threatened or endangered in California” (California Rare Plant Ranks of 1A, presumed extinct in California; 1B, considered rare or endangered in California and elsewhere; and 2, considered rare or endangered in California but more common elsewhere). Note, that while these ranking do not afford the same type of legal protection as ESA or CESA, the uniqueness of these species requires special consideration under CEQA;
- ▲ considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G); or
- ▲ otherwise meets the definition of rare or endangered under CEQA § 15380(b) and (d).

### 4.3.1 Tuolumne Site

No special-status plant or wildlife species are expected to occupy the Tuolumne project site because of a lack of suitable habitat and disturbed nature of the site.

### 4.3.2 Groveland Site

No special-status plant species are expected to occupy the Groveland project site because of a lack of suitable habitat. Three special-status wildlife species, western pond turtle, pallid bat, and western mastiff bat have the potential to be present in the Groveland site or to use it occasionally and are discussed in more detail below. See Attachment 1 for USFWS, CNDDB, and CNPS records within 5 miles of the project sites.

#### WESTERN POND TURTLE

Western pond turtle is a California species of special concern. Western pond turtles are generally associated with permanent or near-permanent aquatic habitats, such as lakes, ponds, streams, freshwater marshes, and agricultural ditches. They require still or slow-moving water with emergent woody debris, rocks, or similar features for basking sites. Pond turtles are highly aquatic but can venture far from water to lay eggs. Nests are typically located on unshaded upland slopes in dry substrates with clay or silt soils. Pond turtles can overwinter in upland sites.

Western pond turtles have been known to utilize waste water ponds and could seasonally utilize the intermittent stream at the Groveland site during the wet season to move between the waste water treatment plant ponds and Pine Mountain Lake. Due to the closed canopy within the riparian area, the project site does

not provide suitable basking areas for the western pond turtle. The upland area in the Groveland site does not provide suitable nesting habitat for the turtle because of its closed canopy and the north aspect of the upland area of the stream.

## **PALLID BAT**

Pallid bat is a California species of special concern. Pallid bat typically occupies a wide variety of habitats, including grasslands, shrublands, woodlands, and forest from sea level up through mixed conifer forests. This bat is most common in open, dry habitats with rocky areas for roosting. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Roosts must protect bats from high temperatures. Bats move deeper into cover if temperatures rise. Night roosts may be in more open sites, such as porches and open buildings. Few hibernation sites are known, but the bat probably uses rock crevices. There are no caves, rock crevices, mines or buildings within the project sites that could provide roosting habitat for this species, however, some of the large oaks with hollows or pines with exfoliating bark at the Groveland site may provide suitable roosting habitat for this species.

## **WESTERN MASTIFF BAT**

Western mastiff bat is a California species of special concern. Western mastiff bat typically occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban habitats. Roosts in crevices in cliff faces, high buildings, trees, and tunnels are required for roosting. There are no rock crevices, high buildings, or tunnels within the project sites that could provide roosting habitat for this species; however, some of the large oaks with hollows or pines with exfoliating bark at the Groveland site provide suitable roosting habitat for this species.

## **4.4 WETLANDS, RIPARIAN HABITAT, AND OTHER SENSITIVE NATURAL COMMUNITIES**

### **4.4.1 Tuolumne Site**

The two parcels have drainage ditches that help drain upland areas. The north parcel has a drainage ditch that did not support wetlands plants or other indicators. The south parcel also has drainage ditch which receives water from the north parcel through a culvert, no wetland vegetation or other wetland indicators were observed within this ditch either. A culvert directs the water from this ditch south and the culvert daylight just on the other side of a gravel driveway on uplands at which point another culvert drains from the parcel southwest of the intersection between Cherry Valley Boulevard N and Bay Street.

The east boundary of the south parcel received runoff from the toddler play area, as well as from the horseshoe game pit area creating a seasonal wetland. Runoff from these areas accumulates on a low spot and wetland vegetation such as curly dock, plantain, nutsedge, and rush (*Eleocharis* sp.) were observed within the moist soil (See Attachment 2 - Photo 3). A larger seasonal wetland is also present within the Tuolumne south parcel and support wetland vegetation. These two seasonal wetlands may be waters of the United States due to potential connectivity with the adjacent riparian area.

### **4.4.2 Groveland Site**

The Groveland west parcel at this site supports an intermittent creek that drains into Pine Mountain Lake and supports riparian vegetation along its banks (See Attachment 2 - Photo 11 and Photo 12). This creek would likely be considered a water of the United States. Similarly, the riparian area surrounding this creek

would be subject to regulation by the California Department of Fish and Wildlife under the Fish and Game Code because of its value to fish and wildlife species.

An ephemeral drainage is also present on the Groveland east parcel. This feature drains roadway storm water onto the site. High water flows have created a gully, but no wetland vegetation was observed within the drainage, the bed and bank dissipate and water overflows as evident by bent grasses and debris flow. Because this drainage drains into the intermittent creek, this drainage may also be considered a water of the United States (See Attachment 2 - Photo 7 and Photo 8).

## **4.5 NESTING BIRDS**

### **4.5.1 Tuolumne Site**

The Tuolumne site does not provide suitable habitat for nesting birds due to sparse vegetation and does not provide adequate nesting substrate. Although the Tuolumne site does not provide suitable nesting habitat, the cottonwood trees in the riparian area of the adjacent lot provide suitable habitat for raptors.

### **4.5.2 Groveland Site**

The Groveland site provides suitable nesting habitat for ground and shrub/tree nesting birds. No nesting birds were observed during the field surveys; however, the surveys were conducted during the end of the nesting season. The Groveland site provides suitable nesting habitat for ground nesting birds such as the California quail (*Callipepla californica*), spotted towhee, mallard duck (*Anas platyrhynchos*), and wild turkey (*Meleagris gallopavo*). The shrubs, pines, and oak trees also provide suitable nesting habitat for shrub/tree nesting birds and raptors.

## **4.6 WILDLIFE MOVEMENT**

Wildlife corridors are features that provide connections between two or more areas of habitat that would otherwise be isolated and unusable. Often drainages, creeks, or riparian areas are used by wildlife as movement corridors as these features can provide cover and access across a landscape.

### **4.6.1 Tuolumne Site**

The Tuolumne site does not support a wildlife movement corridor because it is within the urban area of Tuolumne.

### **4.6.2 Groveland Site**

Although a portion of the Groveland site supports an intermittent creek and riparian area, it does not contain an important regional wildlife corridor because the creek connects the developed areas of Groveland with the Pine Mountain Lake community and does not provide connectivity to larger patches of natural habitat on the landscape. Since the project would need to observe a 100-foot setback from the centerline of the creek (see discussion below), the riparian corridor would be protected, and the existing vegetation would act as a buffer so any local wildlife movement (e.g., skunk, raccoon) could still occur.

## 4.7 TUOLUMNE COUNTY WILDLIFE HANDBOOK

According to the TCWH, all target habitats (first and second priority) shall be protected through Open Space zoning to minimize potential impacts to these habitats pursuant to CEQA. Per the TCWH third priority habitat are to be included within Open Space only where protection of first and second priority habitats does not already total 20 percent of the project site.

### 4.7.1 Tuolumne Site

The majority of the Tuolumne site is annual grassland, which is a fourth priority habitat. The seasonal wetlands, which are a second priority habitat, occupy approximately 4 percent of the site (Table 1). Conversion of these habitat types, if they cannot be avoided, would require permitting and mitigation.

### 4.7.2 Groveland Site

The Groveland site contains intermittent creek and riparian habitat, which are second priority habitats, and montane conifer hardwood, which is a third priority habitat. The remainder of the site is annual grassland or developed, which are fourth priority habitat types, or ephemeral drainage, which does not have a prioritization category (Table 1).

**Table 1 Land Cover Types**

Project Site	Land Cover Type <sup>1</sup>	Habitat Value per TCHW	Approximate Acreage	Percentage of Project Site
Tuolumne North Parcel	Annual grassland - ruderal	Fourth	0.47	100
<b>Tuolumne North Parcel Total</b>			<b>0.47</b>	<b>100</b>
Tuolumne South Parcel	Annual grassland - ruderal	Fourth	1.25	69.06
Tuolumne South Parcel	Seasonal Wetland	Second	0.08	4.42
Tuolumne South Parcel	Urban/Developed	Fourth	0.48	26.52
<b>Tuolumne South Parcel Total</b>			<b>1.81</b>	<b>100</b>
Groveland East	Ephemeral drainage	N/A	0.02	0.48
Groveland East	Montane hardwood-conifer	Third	2.96	70.64
Groveland East	Annual grassland - ruderal	Fourth	1.14	27.21
Groveland East	Urban/Developed	Fourth	0.07	1.67
<b>Groveland East Total</b>			<b>4.19</b>	<b>100</b>
Groveland West	Intermittent creek	Second	0.55	14.10
Groveland West	Montane riparian woodland	Second	1.50	38.46
Groveland West	Montane hardwood-conifer	Third	1.34	34.36
Groveland West	Urban/Developed	Fourth	0.22	5.90
Groveland West	Annual grassland - ruderal	Fourth	0.28	7.10
<b>Groveland West Total</b>			<b>3.9</b>	<b>100</b>

Notes: Ascent Environmental 2018 Field Surveys and Tuolumne County Wildlife Handbook.

<sup>1</sup> See Locations on Exhibit 2 and Exhibit 3

The 100-foot buffer from the centerline of the intermittent creek, protects both the creek and the riparian habitat (both second priority habitats) totaling 52.56 percent of the total Groveland west site. This setback also protects 0.69 acre of montane hardwood-conifer, totaling 17.69 percent of the total Groveland west site. Similarly, the ephemeral drainage 15-foot buffer from the centerline of the drainage protects the entire ephemeral drainage (0.48 percent of the total acreage of the Groveland east parcel and 3.58 percent of montane hardwood-conifer (a third priority habitat) of the Groveland east parcel. These buffers meet the 20 percent protection of second priority habitat and third priority habitat, and together with the recommended measures would reduce effects on the intermittent creek, riparian corridor, and ephemeral drainage.

If these buffers cannot be implemented, the TCWH allows for other mitigation that can include creating, protecting, or improving habitats as similar as possible to those being disturbed by the project. This replacement habitat should be located adjacent to the project site or where most advantageous to wildlife of the County (TCWH Mitigation Measure HH).

## **4.8 CONFLICT WITH LOCAL POLICIES OR ORDINANCES**

Construction in both sites could result in encroachment to potential wetlands. If these wetlands are not avoided and the loss of wetlands is not mitigated, the proposed project would conflict with Tuolumne County General Plan Policy 4.J.5 No Net Loss of Wetland Habitat.

Construction in the Groveland site could result in encroachment into the creek and/or drainage areas. The Tuolumne County Ordinance Code 16.24.180 Drainage Easements requires that fifteen feet in width drainage right-of-way be provided along the centerline of ephemeral drainages and thirty feet along the centerline of intermittent drainages. Constructing the proposed project within these drainage setbacks would conflict with Tuolumne County Ordinance Code.

Construction could result in the removal of montane hardwood conifer habitat which is designated as a third priority habitat. As such the project would need to observe a minimum acreage preservation of habitat (It should be noted that the Tuolumne County Wildlife Handbook states that Third Priority Habitat should be 20 percent of the site but setbacks around Second Priority Habitats [i.e., creeks, riparian areas] can count towards this 20 percent.) Constructing the project without minimizing impacts to montane hardwood conifer or observing a minimum acreage preservation would conflict with General Plan Implementation Program 4.J.a-4.

## **4.9 CONFLICT WITH ADOPTED HABITAT CONSERVATION PLANS**

The Tuolumne and Groveland sites are not within an adopted Habitat Conservation Plan area, as such, construction of the project would not conflict with the provisions of an adopted Habitat Conservation Plan, or other approved conservation plan in the area.

# **5 SUMMARY**

## **5.1 TUOLUMNE SITE**

- ▲ The Tuolumne site is disturbed. Two seasonal wetlands are present within the south parcel, these wetlands may be waters of the United States.
- ▲ Due to its disturbed nature, the Tuolumne site does not provide suitable habitat for special-status plants or wildlife.

- ▲ Although not proposed for disturbance, the riparian area is immediately south of the Tuolumne project site, and the dripline of these trees encroach into the project site.
- ▲ The Tuolumne Site is not within an adopted habitat conservation plan area and does not provide an important wildlife movement corridor.

## 5.2 GROVELAND SITE

- ▲ The Groveland site is forested, but has had recent disturbance due to pine bark beetle tree management
- ▲ The Groveland east parcel supports an ephemeral drainage and the Groveland west parcel supports an intermittent creek and associated riparian area and an ephemeral drainage. The ephemeral drainage and the intermittent creek may be waters of the United States.
- ▲ The forested portions of the Groveland site provide suitable habitat for nesting birds and two special-status bat species. The intermittent creek area provides marginal habitat for western pond turtle.
- ▲ The riparian area within the Groveland site does not represent an important wildlife corridor since it connects two urban areas.
- ▲ The TCWH requires that all second priority habitats (i.e., intermittent creek, riparian area) be preserved with Open Space zoning, furthermore third priority habitat are to be included within Open Space only where protection of first and/or second priority habitats does not already total 20 percent of the project site, however, the setback already protects 52.56 percent of the Groveland west parcel.
- ▲ Potential conflicts with Tuolumne County General Plan and Code of Ordinance could occur if wetlands are not avoided or if drainage setbacks are not implemented.
- ▲ The Groveland site is not within an adopted habitat conservation plan area.

## 5.3 RECOMMENDATIONS

### 5.3.1 Aquatic Resources

The Tuolumne site supports two seasonal wetlands and the Groveland Site supports an intermittent creek and an ephemeral drainage. It is recommended that these features be avoided. In the event that these features cannot be avoided, an aquatic resources delineation would need to be conducted and submitted to the U.S. Army Corps of Engineers (USACE) for verification.

## PROTECTIVE MEASURES

There are a number of available measures that the County could consider to avoid impacts to waters of the U.S. and waters of the State. These are listed below.

### TUOLUMNE SITE

- ▲ On the Tuolumne site, it is recommended that the seasonal wetland adjacent to the toddler playing area and the horseshow pit area and the larger seasonal wetland be avoided entirely.
- ▲ Although the riparian area adjacent to the Tuolumne site is not proposed for disturbance, the dripline of some of these riparian trees encroach onto the Tuolumne project site area. To ensure that no impacts to

the riparian area occur, all project activities should avoid the dripline of the riparian trees. If the dripline of these trees cannot be avoided, an arborist should evaluate if there would be an impact to the health and survival of the trees.

## **GROVELAND SITE**

- ▲ On the Groveland site, to comply with the TCWH, the required O (Open Space) zoning for the riparian area should be adopted before issuance of a grading permit or building permit for project construction. Note that the County may determine that methods of perpetual open-space conservation other than zoning (i.e., conservation easements) would be consistent with the intent of the TCWH.
- ▲ Similarly, all construction elements within the Groveland site should be constructed at least 100-feet from the centerline of the unnamed intermittent creek, and at least 15-feet from the centerline of the ephemeral drainage. The 100-foot buffer is recommended to fully protect existing riparian vegetation along the unnamed intermittent drainage. All construction within the Tuolumne site should avoid the identified boundaries of the seasonal wetlands.

## **FOR BOTH LOCATIONS**

- ▲ All areas to be avoided during construction activities should be fenced or flagged as close to construction limits as possible.
- ▲ Where wetlands or other waters cannot be avoided by project-related activities, a preliminary wetland delineation should be conducted and submitted to USACE for verification. The aquatic resources may also be subject to RWQCB, and DFW regulation under Section 1602 of the Fish and Game Code. No grading, fill, vegetation removal, or other ground disturbing activities should occur within these features until all required permits, regulatory approvals, and permit conditions for effects on aquatic resources are secured.
- ▲ For those wetlands that cannot be avoided, Tuolumne County should commit to replace, restore, or enhance on a “no net loss” basis (in accordance with USACE, RWQCB, and DFW). Wetland habitat should be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE, RWQCB, and DFW, as appropriate, depending on agency jurisdiction, and as determined during the permitting processes. This measure would be consistent with TCWH mitigation.

## **5.3.2 Western Pond Turtle**

### **GROVELAND SITE**

Due to the proximity of wastewater treatment ponds and the presence of the intermittent creek, there is a moderate to low potential for western pond turtle to occur within the Groveland site. To avoid injury or mortality of western pond turtle the following protective measures are provided.

### **PROTECTIVE MEASURES**

- ▲ Before ground disturbance, the County or its contractor should identify the limits of construction, access route and avoidance areas.
- ▲ A pre-construction survey for western pond turtle should be conducted by a qualified biologist within 24 hours before the commencement of ground disturbance activities. Surveys should be conducted within the project disturbance areas and all access routes to avoid and minimize injury or mortality of western pond turtle. If a western pond turtle is found within the work areas, exclusion fencing should be installed surrounding the construction areas and the western pond turtle should be allowed to move outside of

the construction area on its own volition. If this is not feasible, the turtle(s) should be captured by a qualified biologist and relocated out of the construction area to suitable habitat at least 100 feet from the work area.

### 5.3.3 Occupied Roosting Bats

#### GROVELAND SITE

The forested habitat within the Groveland site would require some tree removal. Some of these trees could provide suitable day roosts, maternity colony roosts, and/or hibernation roosts for bats. Special-status bats that could roost on site include pallid bat and western mastiff bat.

Removal of roosting trees, or other construction activities that cause noise, vibration, or physical disturbance to these trees, could affect the survival of adult or young bats if they are present within the trees identified for removal at the time of the activity.

#### PROTECTIVE MEASURES

Surveys for roosting bats on the project site should be conducted by a qualified biologist. Surveys should consist of a daytime pedestrian survey looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats. The type of survey would depend on the condition of the trees to be removed. If no bat roosts are found, then no further study would be required. If evidence of bat use is observed, the number and species of bats using the roost should be determined.

If roosts of pallid, and/or western mastiff bats are determined to be present and must be removed, the bats should be excluded from the roosting site before the tree is removed. A program addressing compensation, exclusion methods, and roost removal procedures should be developed in consultation with DFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) should be replaced in consultation with DFW and may include salvaging of the roost tree and securing it to a tree within the Open space zone area or construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. Roost replacement should be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site, the trees may be removed or sealed.

### 5.3.4 Nesting Birds

#### BOTH SITES

To minimize potential disturbance to nesting birds, project activities, including vegetation removal and grading, should occur during the non-breeding season (September 1 – February 1) unless it is not feasible to do so, in which case the following measures should be applied. Although the Tuolumne site does not provide suitable nesting habitat, the adjacent riparian area may provide suitable nesting habitat and activities within the project site may affect nesting birds if present.

- ▲ Removal of trees greater than 5 inches diameter at breast height should be limited to the greatest degree possible.
- ▲ If construction activity is scheduled to occur during the nesting season (February 14 to September 14), a qualified biologist should conduct preconstruction surveys to identify active nests on and within 500 feet

of the project site that could be affected by project construction. The surveys should be conducted before the approval of grading and/or improvement plans (as applicable) and no less than 14 days and no more than 30 days before the beginning of construction in a particular area. If no nests are found, no further mitigation is required.

- ▲ If active nests are found, impacts on nesting native birds should be avoided by establishment of appropriate buffers around the nests. No project activity should commence within the buffer area until a qualified biologist confirms that any young have fledged, or the nest is no longer active. A 500-foot buffer around raptor nests and a 35-foot buffer around other native bird nests are generally adequate to protect them from disturbance, but the size of the buffer may be adjusted by a qualified biologist in consultation with DFW depending on species and site-specific conditions. If construction cannot be delayed within the buffer area, monitoring of the nest by a qualified biologist during construction activities should be required if the activity has potential to adversely affect the nest.

## 6 REFERENCES

- California Natural Diversity Database. 2018. Geographic Information System database search for 5-mile radius of the Tuolumne and Groveland sites. Biogeographic Data Branch, California Department of Fish and Game, Sacramento, California. August 23, 2018.
- California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants (online edition, v8-03). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed August 23, 2018].
- CNDDDB. See California Natural Diversity Database.
- CNPS. See California Native Plant Society, Rare Plant Program.
- Frank, Maureen. Deputy County Administrator, Tuolumne County. August 27, 2018—spoke with Carlos Alvarado of Ascent Environmental regarding the two project locations and trees removed at the Groveland site due to pine bark beetle infestation. Sonora, CA.
- Tuolumne County. 1996. *Tuolumne County General Plan*. Website <https://www.tuolumnecounty.ca.gov/185/General-Plan-Policy> [accessed September 5, 2018]
- Tuolumne County. 1987. *Tuolumne County Wildlife Handbook*. Tuolumne County Planning Department. Sonora CA.
- U.S. Fish and Wildlife Service. 2018. Information for Planning and Consultation Resource List for the Tuolumne and Groveland Sites. <https://ecos.fws.gov/ipac/location/CIXVK4MFFNDZTEJATDNQIWOJE4/resources> and <https://ecos.fws.gov/ipac/location/NF3MIPPLUZB2ZF3SNDUT2ZWKRA/resources>. Accessed August 23, 2018.
- USFWS. See U.S. Fish and Wildlife Service.

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# **Attachment 1**

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**Database Queries**



## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

### Location

Tuolumne County, California



### Local office

Sacramento Fish And Wildlife Office

(916) 414-6600  
(916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

## Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project-level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following.

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered. IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location.

### Amphibians

name	status
California Red-legged Frog, <i>Rana dreyfoxi</i> There is no critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ipac/species/2991">https://ecos.fws.gov/ipac/species/2991</a>	Threatened

### Fishes

name	status
Delta Smelt, <i>Hypomesus transpacificus</i> There is no critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ipac/species/321">https://ecos.fws.gov/ipac/species/321</a>	Threatened

### Critical habitats

Potential effects to critical habitats in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

### Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Bird Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links.

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/subject-areas/management-and-guidance/conservation-measures.php>

<https://ecos.fws.gov/ipac/location/CXVK4MF-FNDZTEJ-ATD-NQMOJE/4/e-sources#wetlands>

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- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardsconservationmeasures.pdf>

#### THERE ARE NO MIGRATORY BIRDS OF CONSERVATION CONCERN EXPECTED TO OCCUR AT THIS LOCATION.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact mitigation measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary, [Additional Measures](#) and/or [Permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BOC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey banding and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10 m grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BOC species in that area, a [Bald Eagle](#) (regardless of requirements that apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource List includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-Bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey banding and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology's All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology's Geographic Bird Guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the time frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds defined through IPaC fall into the following distinct categories of concern:

1. "BOC (range-wide)" birds are [Birds of Conservation Concern \(BOC\)](#) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands)
2. "BOC - BCR" birds are BOC that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA, and
3. "Non-BOC - Vulnerable" birds are not BOC species in your project area, but appear on your list either because of the [Bald Eagle](#) requirements (for eagles) or (for non-eagles) potential susceptibility to offshore risks from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BOC species of range-wide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of birds (species) in your project area off the Atlantic Coast, please visit the [Bird Near-Open Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the Portal maps through the [NOAA-NOCS Interactive Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [seabird studies](#) or contact [Caitlin Selinger](#) or [Pam Leitch](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location?". Please be aware this report provides the "probability of presence" of birds within the 10 m grid cell(s) that overlap your project, not your exact project footprint. On the graphs provided, please take care to carefully read the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort list is key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be here, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird list resources page.

## Facilities

Wildlife refuges and fish hatcheries

HEIGHT AND BATHYMETRY INFORMATION IS NOT AVAILABLE AT THE TIME

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THE LOCATION.

### Data Limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geology. A margin of error is inherent in the use of imagery, thus detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analyst, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National Mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and near shore coastal waters. Some deepwater reef communities (coral or tube field worm reefs) have also been excluded from the Inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this Inventory. There is no attempt in either the design or products of this Inventory to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetlands areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdiction that may affect such activities.

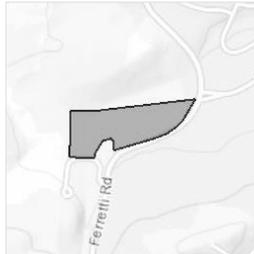
## IPaC resource list

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### Location

Tuolumne County, California



### Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📍 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

## Endangered species

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Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following.

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Listed species and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered. IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location.

### Amphibians

name	Status
California Red-legged Frog, <i>Rana sierrae</i> There is no critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ipac/species/7991">https://ecos.fws.gov/ipac/species/7991</a>	Threatened

### Fishes

name	Status
Delta Smelt, <i>Hypomesus transpacificus</i> There is no critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ipac/species/321">https://ecos.fws.gov/ipac/species/321</a>	Threatened

### Critical habitats

Potential effects to critical habitats in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

### Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Bird Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links.

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to Birds <http://www.fws.gov/birds/management/impact-assessment-10a-b-and-guidance/conservation-measures.php>

[https://ecos.fws.gov/ipac/location/NF3MIPP\\_LUZB2ZF3SNDU2Z2W/KRA/activities#wetlands](https://ecos.fws.gov/ipac/location/NF3MIPP_LUZB2ZF3SNDU2Z2W/KRA/activities#wetlands)

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- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwideconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BOC\)](#) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birds and the general public have sighted birds in and around your project area, visit the [E-Bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the **PROBABILITY OF PRESENCE SUMMARY** at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOME TIME WITHIN THE FOLLOWING SPECIFIC DATES, WHICH IS A VERY BROAD ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. BREEDING IS WHOLLY INDICATES THAT THE BIRD DOES NOT KNOWNLY BREED IN YOUR PROJECT AREA.)
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BOC) in this area, but warrants attention because of the Eagle Act or for potential susceptibility in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1586">https://ecos.fws.gov/ecp/species/1586</a>	Breeds Jan 1 to Aug 31
<b>Common Yellowthroat</b> <i>Geothlypis trichas inornata</i> This is a Bird of Conservation Concern (BOC) only in particular Bird Conservation Regions (BCRs) in the continental USA. <a href="https://ecos.fws.gov/ecp/species/2084">https://ecos.fws.gov/ecp/species/2084</a>	Breeds May 20 to Jul 31
<b>Golden Eagle</b> <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BOC) in this area, but warrants attention because of the Eagle Act or for potential susceptibility in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1580">https://ecos.fws.gov/ecp/species/1580</a>	Breeds Jan 1 to Aug 31
<b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i> This is a Bird of Conservation Concern (BOC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a>	Breeds Mar 20 to Sep 20
<b>Nuttall's Woodpecker</b> <i>Picoides nuttalli</i> This is a Bird of Conservation Concern (BOC) only in particular Bird Conservation Regions (BCRs) in the continental USA. <a href="https://ecos.fws.gov/ecp/species/9410">https://ecos.fws.gov/ecp/species/9410</a>	Breeds Apr 1 to Jul 20
<b>Oak Titmouse</b> <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BOC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9686">https://ecos.fws.gov/ecp/species/9686</a>	Breeds Mar 15 to Jul 15
<b>Rufous Hummingbird</b> <i>selasphorus rufus</i> This is a Bird of Conservation Concern (BOC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8002">https://ecos.fws.gov/ecp/species/8002</a>	Breeds elsewhere
<b>Song Sparrow</b> <i>Melospiza melodia</i> This is a Bird of Conservation Concern (BOC) only in particular Bird Conservation Regions (BCRs) in the continental USA. 	Breeds Feb 20 to Sep 5
<b>Spotted Towhee</b> <i>Pipilo maculatus clemensae</i> This is a Bird of Conservation Concern (BOC) only in particular Bird Conservation Regions (BCRs) in the continental USA. <a href="https://ecos.fws.gov/ecp/species/4263">https://ecos.fws.gov/ecp/species/4263</a>	Breeds Apr 15 to Jul 20
<b>White Headed Woodpecker</b> <i>Picoides albolarvatus</i> This is a Bird of Conservation Concern (BOC) only in particular Bird Conservation Regions (BCRs) in the continental USA. <a href="https://ecos.fws.gov/ecp/species/9411">https://ecos.fws.gov/ecp/species/9411</a>	Breeds May 1 to Aug 15
<b>Wren tit</b> <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BOC) throughout its range in the continental USA and Alaska. 	Breeds Mar 15 to Aug 10

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project areas. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence (i)**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps.

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ , at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

**Breeding Season (ii)**

Yellow bars denote a very liberal estimate of the timeframe inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project areas.

**Survey Effort (i)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project areas overlaps. The number of surveys is expressed as a range, for example, 33 to 643 surveys.

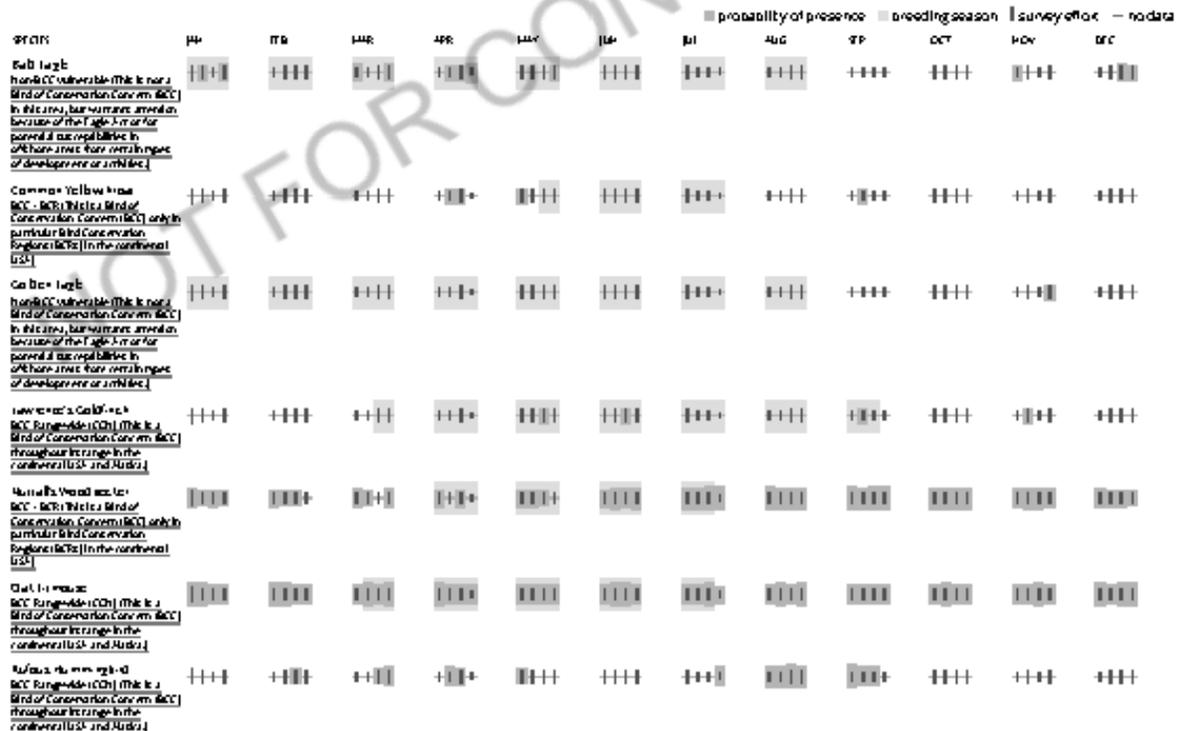
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

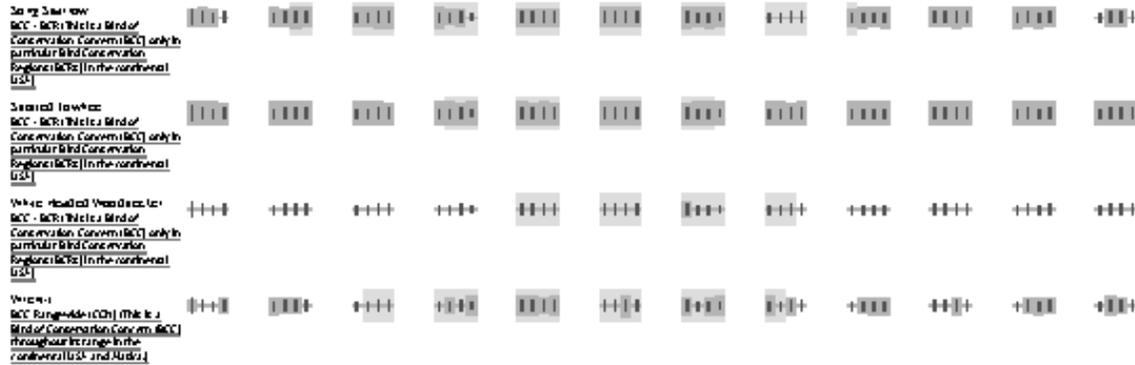
**No Data (-)**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Habitat-Specific Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the [Probability of Presence Summary](#), [Additional Measures](#) and/or [Permits](#), may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BOC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey banding and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10 m grid cell(s) within your project interests, and that have been identified as warranting special attention because they are a BOC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activity or development.

Again, the Migratory Bird Resource List includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey banding and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the [Probability of Presence Summary](#) and check out the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell List of Ornithology All-Around Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell List of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If Breeds elsewhere, it indicates that the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds defined through IPaC fall into the following distinct categories of concern:

1. BCC - Range-wide birds are [Birds of Conservation Concern \(BOC\)](#) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands).
2. BCC - BCR birds are BOCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA, and
3. Non-BOC - Vulnerable birds are not BOC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibility to offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BOC species of range-wide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of birds present in your project area off the Atlantic Coast, please visit the [Mid-Range Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternatively, you may download the bird model results files underlying the portal maps through the [NOAA-NCCOS Invasive Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [pinnacled Guilford](#) or contact [Caleb Selinger](#) or [Pam Lecher](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying waterfowl birds that may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location?". Please be aware this report provides the probability of presence of birds within the 10 m grid cell(s) that overlap your project, not your exact project footprint. On the graphs

provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence scores can be viewed as more dependable. In contrast, a low survey effort (a red horizontal bar) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the [FAQ "Tell me about conservation measures to avoid or minimize impacts to migratory birds"](#) at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuges

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THE LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWIs wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI dataset. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

REFRESH  
R4SBC

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery, thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analyst, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National Mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include sea grasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and near shore coastal waters. Some deepwater reef communities (such as tube field worm reefs) have also been excluded from the Inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this Inventory. There is no attempt, therefore, the design or product of this Inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of a appropriate Federal, state, or local agencies concerning specific agency regulatory programs and proprietary jurisdictions that may affect such activities.



**Selected Elements by Scientific Name**  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Query Criteria: BIOS selection

Groveland Site

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/GDFW SSC or FP
<i>Allium tuolumnense</i> Rawhide Hill onion	PMLIL022W0	None	None	G2	S2	1B.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Banksula tuolumne</i> Tuolumne cave harvestman	ILARA14090	None	None	G1	S1	
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	PDONA05051	None	None	G4G5T3	S3	1B.2
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Cryptantha spithamea</i> Red Hills cryptantha	PDBOR0A2M2	None	None	G2	S2	1B.3
<i>Diplacus pulchellus</i> yellow-lip pansy monkeyflower	PDSCR1B280	None	None	G2	S2	1B.2
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	PDAP10Z0P0	None	None	G2	S2	1B.2
<i>Erythranthe filicaulis</i> slender-stemmed monkeyflower	PDSCR1B150	None	None	G2	S2	1B.2
<i>Erythronium tuolumnense</i> Tuolumne fawn lily	PMLIL0U0H0	None	None	G2G3	S2S3	1B.2
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Lasiurus blossevillii</i> western red bat	AMACC05060	None	None	G5	S3	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Monadenia circumcarinata</i> keeled sideband	IMGASC7020	None	None	G1	S1	
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
<i>Strix nebulosa</i> great gray owl	ABNSB12040	None	Endangered	G5	S1	
<i>Stygobromus harai</i> Hara's Cave amphipod	ICMAL05470	None	None	G1G2	S1S2	

Record Count: 19



**Selected Elements by Scientific Name**  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Query Criteria: BIOS selection

Tuolumne Site

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Clarkia australis</i> Small's southern clarkia	PDONA05040	None	None	G2	S2	1B.2
<i>Clarkia biloba ssp. australis</i> Mariposa clarkia	PDONA05051	None	None	G4G5T3	S3	1B.2
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Diplacus pulchellus</i> yellow-lip pansy monkeyflower	PDSCR1B280	None	None	G2	S2	1B.2
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	PDAP10Z0P0	None	None	G2	S2	1B.2
<i>Erythronium tuolumnense</i> Tuolumne fawn lily	PML1L0U0H0	None	None	G2G3	S2S3	1B.2
<i>Euderma maculatum</i> spotted bat	AMACC07010	None	None	G4	S3	SSC
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4	
<i>Lavinia symmetricus ssp. 1</i> San Joaquin roach	AFCJB19021	None	None	G4T3Q	S3	SSC
<i>Lomatium stebbinsii</i> Stebbins' lomatium	PDAP11B1V0	None	None	G2	S2	1B.1
<i>Margaritifera falcata</i> western pearlshell	IMBIV27020	None	None	G4G5	S1S2	
<i>Monadenia circumcarinata</i> keeled sideband	IMGASC7020	None	None	G1	S1	
<i>Monadenia mormonum buttoni</i> Button's Sierra sideband	IMGASC7071	None	None	G2T1	S1S2	
<i>Monadenia tuolumneana</i> Tuolumne sideband	IMGASC7100	None	None	G1	S1	
<i>Rana boylei</i> foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC

Record Count: 18

## Plant List

15 matches found. [Click on scientific name for details](#)

### Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3], Found in Quads 3712082, 3712083 3712073 and 3712072;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
<a href="#">Allium jepsonii</a>	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
<a href="#">Allium tuolumnense</a>	Rawhide Hill onion	Alliaceae	perennial bulbiferous herb	Mar-May	1B.2	S2	G2
<a href="#">Clarkia australis</a>	Small's southern clarkia	Onagraceae	annual herb	May-Aug	1B.2	S2	G2
<a href="#">Clarkia biloba ssp. australis</a>	Mariposa clarkia	Onagraceae	annual herb	Apr-Jul	1B.2	S2S3	G4G5T2T3
<a href="#">Clarkia mostrata</a>	beaked clarkia	Onagraceae	annual herb	Apr-May	1B.3	S2S3	G2G3
<a href="#">Cryptantha spithamea</a>	Red Hills cryptantha	Boraginaceae	annual herb	Apr-May	1B.3	S2	G2
<a href="#">Diplacus pulchellus</a>	yellow-lip pansy monkeyflower	Phymaceae	annual herb	Apr-Jul	1B.2	S2	G2
<a href="#">Eryngium pinnatisectum</a>	Tuolumne button-celery	Aiaceae	annual / perennial herb	May-Aug	1B.2	S2	G2
<a href="#">Erythranthe filicaulis</a>	slender-stemmed monkeyflower	Phymaceae	annual herb	Apr-Aug	1B.2	S2	G2
<a href="#">Erythronium tuolumnense</a>	Tuolumne fawn lily	Liliaceae	perennial bulbiferous herb	Mar-Jun	1B.2	S2S3	G2G3
<a href="#">Lomatium congdonii</a>	Congdon's lomatium	Apiaceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Lupinus spectabilis</a>	shaggyhair lupine	Fabaceae	annual herb	Apr-May	1B.2	S2	G2
<a href="#">Packera layneae</a>	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
<a href="#">Pseudobahia bahifolia</a>	Hartweg's golden sunburst	Asteraceae	annual herb	Mar-Apr	1B.1	S2	G2
<a href="#">Senecio clevelandii var. heterophyllus</a>	Red Hills ragwort	Asteraceae	perennial herb	May-Jul	1B.2	S2	G4T2Q

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#### Contributors

[The California Database](#)  
[The California Lichen Society](#)  
[California Natural Diversity Database](#)  
[The Jepson Flora Project](#)  
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[CNP photos](#)

#### Questions and Comments

[rareplants@cnps.org](mailto:rareplants@cnps.org)

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# **Attachment 2**

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**Photographs**





Source: Ascent 2018

Photo 1. Representative view of Tuolumne south parcel.



Source: Ascent 2018

Photo 2. Representative view of Tuolumne south parcel.



Source: Ascent 2018

Photo 3. Tuolumne south parcel - Representative photograph of wetland plants growing adjacent to eastern boundary with toddler play area.



Source: Ascent 2018

Photo 4. Tuolumne south parcel - Representative photograph of human-created wetland outside of the south parcel.



Source: Ascent 2018

Photo 5. Groveland east parcel - Representative view of the montane hardwood-conifer habitat.



Source: Ascent 2018

Photo 6. Groveland east parcel - pine removal due for pine beetle control.



Source: Ascent 2018

Photo 7. Groveland east parcel - Representative view of ephemeral drainage.



Source: Ascent 2018

Photo 8. Groveland east parcel - ephemeral drainage within pine removal area.



Source: Ascent 2018

Photo 9. Groveland east parcel - representative view of electric utility corridor.



Source: Ascent 2018

Photo 10. Groveland site - representative view of existing access road connecting the east and west parcels.



Source: Ascent 2018

Photo 11. Groveland west parcel -representative view of intermittent creek and riparian area.



Source: Ascent 2018

Photo 12. Groveland west parcel - Culvert under the Groveland Community Service District access road showing scouring pool.



Source: Ascent 2018

Photo 13. Groveland west parcel – representative view of montane hardwood-conifer habitat.



Source: Ascent 2018

Photo 14. Groveland west parcel – representative view of unknown wells.

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# **Attachment A5**

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Farmlands Protection

## Farmlands Protection (CEST and EA)

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	<a href="#">7 CFR Part 658</a>
Reference		
<a href="https://www.hudexchange.info/environmental-review/farmlands-protection">https://www.hudexchange.info/environmental-review/farmlands-protection</a>		

**1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?**

Yes → *Continue to Question 2.*

No

**Explain how you determined that agricultural land would not be converted:**

Available data for designated Farmland is provided by the California Department of Conservation. There is no existing data available at this time for land within Tuolumne County. However, based on the general plan land use designations the project site is not within an agriculture land use designation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting your determination.*

**2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?**

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nracs> or your NRCS state soil scientist [http://soils.usda.gov/contact/state\\_offices/](http://soils.usda.gov/contact/state_offices/) for assistance

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes → *Continue to Question 3.*

**3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.**

- Complete form **AD-1006**, "Farmland Conversion Impact Rating" [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1045394.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf) and contact the state soil scientist before sending it to the local NRCS District Conservationist.  
(NOTE: for corridor type projects, use instead form **NRCS-CPA-106**, "Farmland Conversion Impact Rating for Corridor Type Projects: [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1045395.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf).)
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 (or form NRCS-CPA-106 if applicable) to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

**Document your conclusion:**

- Project will proceed with mitigation.

**Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

- Project will proceed without mitigation.

**Explain why mitigation will not be made here:**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

There are no areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project site or project vicinity. Further, the project site is not currently designated or zoned for farmland uses. The project would not convert Farmland to a nonagricultural use.

**Are formal compliance steps or mitigation required?**

Yes

No



# Search for Maps, Reports, and Data

The links below provide FMMP information; some older information types may only be available in hardcopy format. Base year mapping for most counties is 1984.

## COUNTY DATA:

Available information includes:

- GIS data and metadata-*Note: Beginning with the 2014 update cycle, FMMP GIS data is posted in NAD83 (older GIS data, 1984-2012, remains in NAD 27)*
- Biennial land use conversion tables
- Historic data summaries
- Field analyst reports
- Soil units qualifying for Prime Farmland or Farmland of Statewide Importance

<a href="#">Alameda</a>	<a href="#">Los Angeles</a>	<a href="#">Riverside</a>	<a href="#">Sierra Valley</a>
<a href="#">Amador</a>	<a href="#">Madera</a>	<a href="#">Sacramento</a>	<a href="#">Siskiyou</a>
<a href="#">Butte</a>	<a href="#">Marin</a>	<a href="#">San Benito</a>	<a href="#">Solano</a>
<a href="#">Colusa</a>	<a href="#">Mariposa</a>	<a href="#">San Bernardino</a>	<a href="#">Sonoma</a>
<a href="#">Contra Costa</a>	<a href="#">Mendocino</a>	<a href="#">San Diego</a>	<a href="#">Stanislaus</a>
<a href="#">El Dorado</a>	<a href="#">Merced</a>	<a href="#">San Joaquin</a>	<a href="#">Sutter</a>
<a href="#">Fresno</a>	<a href="#">Modoc</a>	<a href="#">San Luis Obispo</a>	<a href="#">Tehama</a>
<a href="#">Glenn</a>	<a href="#">Monterey</a>	<a href="#">San Mateo</a>	<a href="#">Tulare</a>
<a href="#">Imperial</a>	<a href="#">Napa</a>	<a href="#">Santa Barbara</a>	<a href="#">Ventura</a>
<a href="#">Kern</a>	<a href="#">Nevada</a>	<a href="#">Santa Clara</a>	<a href="#">Yolo</a>
<a href="#">Kings</a>	<a href="#">Orange</a>	<a href="#">Santa Cruz</a>	<a href="#">Yuba</a>
<a href="#">Lake</a>	<a href="#">Placer</a>	<a href="#">Shasta</a>	

Feedback

Full size county PDF maps are available, beginning with 2006 data. These large maps are formatted to print on 36" plotters, or zoom in to your area of interest for greater detail. Individual counties may consist of one to three map sheets; PDF files may be up to 7 MB in size. Files are [posted on our FTP site](#) as they become available. Please see the [FTP Readme page](#) for more information.

## REGIONAL AND STATEWIDE INFORMATION:

Available information includes:

- [The California Farmland Conversion Reports](#)- PDF versions are available starting with the 1992-1994 update cycle.
- Regional tables are comprised of three worksheets with information on:
  1. The sources of urban land,
  2. Irrigated farmland changes aside from urbanization, and
  3. Net change in irrigated land
- Biennial Statewide Conversion table

1992-1994: [Regional Tables](#) and [Statewide Table](#)  
 1994-1996: [Regional Tables](#) and [Statewide Table](#)  
 1996-1998: [Regional Tables](#) and [Statewide Table](#)  
 1998-2000: [Regional Tables](#) and [Statewide Table](#)

- 2000-2002: [Regional Tables](#) and [Statewide Table](#)
- 2002-2004: [Regional Tables](#) and [Statewide Table](#)
- 2004-2006: [Regional Tables](#) and [Statewide Table](#)
- 2006-2008: [Regional Tables](#) and [Statewide Table](#)
- 2008-2010: [Regional Tables](#) and [Statewide Table](#)
- 2010-2012: [Regional Tables](#) and [Statewide Table](#)

Note: Some files on this site are in Adobe Acrobat (PDF) or compressed (ZIP) format. Utilities to read both are freely available on the internet. Spreadsheet information is formatted in Excel 2000 for Windows. Geographic information on the FTP site is posted in ESRI Shape File (SHP) format, with metadata in HTML format.

Please contact us via [email](#) or at 916-324-0850 if you have additional questions.

### FMMP Data Links

- [FMMP Home](#)
- [Reports and Statistics](#)
- [Contact Us](#)

#### FARMLAND MAPPING AND MONITORING PROGRAM MENU

#### About DOC

- > Mission & Vision
- > Meet DOC Leadership
- > Upcoming Meetings & Events
- > Contact Us
- > Sitemap

#### Data & Information

- > Public Records Act Requests
- > WellSTAR
- > Aliso Canyon Testing
- > Farmland Mapping and Monitoring
- > Earthquake Preparation

#### Maps

- > Earthquake Zone App (EQ Zapp)
- > CGS Regulatory Maps
- > Well Finder
- > Geologic Map of California
- > Fault Activity Map of California

#### Site Resources

- > Conditions of Use
- > Privacy Policy
- > Accessibility
- > Disclaimer
- > Register to Vote

**Feedback**



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# **Attachment A6**

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Floodplains

## Flood Insurance (CEST and EA)

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).
<b>Reference</b>		
<a href="https://www.hudexchange.info/environmental-review/flood-insurance">https://www.hudexchange.info/environmental-review/flood-insurance</a>		

**1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?**

No. This project does not require flood insurance or is excepted from flood insurance. →  
*Continue to the Worksheet Summary.*

Yes → *Continue to Question 2.*

**2. Provide a FEMA/FIRM map showing the site.**

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

**Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?**

No → *Continue to the Worksheet Summary.*

Yes → *Continue to Question 3.*

**3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?**

Yes, the community is participating in the National Flood Insurance Program.

For loans, loan insurance or loan guarantees, flood insurance coverage must be continued for the term of the loan. For grants and other non-loan forms of financial assistance, flood insurance coverage must be continued for the life of the building irrespective of the transfer of ownership. The amount of coverage must equal the total project cost or the maximum coverage limit of the National Flood Insurance Program, whichever is less

Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

→ *Continue to the Worksheet Summary.*

- Yes, less than one year has passed since FEMA notification of Special Flood Hazards. If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ *Continue to the Worksheet Summary.*

- No. The community is not participating, or its participation has been suspended.

Federal assistance may not be used at this location. Cancel the project at this location.

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) delineating flood hazard zones for communities. The project site is located within an area identified on the FEMA FIRM Panel Number 06109C0900C (dated October 2017) as "Zone X," an area of minimal flood hazard and is not within the 100-year floodplain (See attached map). The proposed project would not have any effect on the location of habitable structures, nor locate any people or habitable structures within any areas prone to flood. The project would not result in increased flood risk to people.

#### **Are formal compliance steps or mitigation required?**

Yes

No

## Floodplain Management (CEST and EA)

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55
<b>Reference</b>		
<a href="https://www.hudexchange.info/environmental-review/floodplain-management">https://www.hudexchange.info/environmental-review/floodplain-management</a>		

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD's floodplain management regulations in Part 55?

Yes

**Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(7) or (8), provide supporting documentation.**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

No → *Continue to Question 2.*

2. **Provide a FEMA/FIRM or ABFE map showing the site.**

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs) or Advisory Base Flood Elevations (ABFEs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

**Does your project occur in a floodplain?**

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes

**Select the applicable floodplain using the FEMA map or the best available information:**

Floodway → *Continue to Question 3, Floodways*

- Coastal High Hazard Area (V Zone) → Continue to Question 4, Coastal High Hazard Areas
- 500-year floodplain (B Zone or shaded X Zone) → Continue to Question 5, 500-year Floodplains
- 100-year floodplain (A Zone) → The 8-Step Process is required. Continue to Question 6, 8-Step Process

### 3. **Floodways**

#### **Is this a functionally dependent use?**

- Yes

The 8-Step Process is required. Work with your HUD FEO to determine a way to satisfactorily continue with this project. Provide a completed 8-Step Process, including the early public notice and the final notice.

→Continue to Question 6, 8-Step Process

- No

Federal assistance may not be used at this location unless a 55.12(c) exception applies. You must either choose an alternate site or cancel the project at this location.

### 4. **Coastal High Hazard Area**

#### **Is this a critical action?**

- Yes

Critical actions are prohibited in coastal high hazard areas. Federal assistance may not be used at this location. Unless the action is excepted at 24 CFR 55.12(c), you must either choose an alternate site or cancel the project.

- No

**Does this action include construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?**

- Yes, there is new construction.

New construction is prohibited in V Zones ((24 CFR 55.1(c)(3)).

- No, this action concerns only a functionally dependent use, existing construction(including improvements), or reconstruction following destruction caused by a disaster.

This construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ Continue to Question 6, 8-Step Process

**5. 500-year Floodplain**

**Is this a critical action?**

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes → Continue to Question 6, 8-Step Process

**6. 8-Step Process.**

**Does the 8-Step Process apply? Select one of the following options:**

8-Step Process applies.

Provide a completed 8-Step Process, including the early public notice and the final notice.

→ Continue to Question 7, Mitigation

5-Step Process is applicable per 55.12(a)(1-3).

Provide documentation of 5-Step Process.

Select the applicable citation:

55.12(a)(1) HUD actions involving the disposition of HUD-acquired multifamily housing projects or “bulk sales” of HUD-acquired one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24).

55.12(a)(2) HUD's actions under the National Housing Act (12 U.S.C. 1701) for the purchase or refinancing of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, and intermediate care facilities, in communities that are in good standing under the NFIP.

55.12(a)(3) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, intermediate care facilities, and one- to four-family properties, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the number of units is not increased more than 20 percent, the action does not involve a conversion from nonresidential to residential land use, the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10), and the footprint of the structure and paved areas is not significantly increased.

55.12(a)(4) HUD's (or the recipient's) actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing nonresidential buildings and structures, in communities that are in the

Regular Program of the NFIP and are in good standing, provided that the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased.

→ *Continue to Question 7, Mitigation*

- 8-Step Process is inapplicable per 55.12(b)(1-4).

Select the applicable citation:

- 55.12(b)(1) HUD's mortgage insurance actions and other financial assistance for the purchasing, mortgaging or refinancing of existing one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24), where the action is not a critical action and the property is not located in a floodway or coastal high hazard area.
- 55.12(b)(2) Financial assistance for minor repairs or improvements on one- to four-family properties that do not meet the thresholds for “substantial improvement” under § 55.2(b)(10)
- 55.12(b)(3) HUD actions involving the disposition of individual HUD-acquired, one- to four-family properties.
- 55.12(b)(4) HUD guarantees under the Loan Guarantee Recovery Fund Program (24 CFR part 573) of loans that refinance existing loans and mortgages, where any new construction or rehabilitation financed by the existing loan or mortgage has been completed prior to the filing of an application under the program, and the refinancing will not allow further construction or rehabilitation, nor result in any physical impacts or changes except for routine maintenance.
- 55.12(b)(5) The approval of financial assistance to lease an existing structure located within the floodplain, but only if—
- (i) The structure is located outside the floodway or Coastal High Hazard Area, and is in a community that is in the Regular Program of the NFIP and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24);
  - (ii) The project is not a critical action; and
  - (iii) The entire structure is or will be fully insured or insured to the maximum under the NFIP for at least the term of the lease.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

## **7. Mitigation**

**For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

**Which of the following mitigation/minimization measures have been identified for this project in the 8-Step or 5-Step Process? Select all that apply.**

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology
- Planting or restoring native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements or similar easements
- Floodproofing of structures
- Elevating structures including freeboarding above the required base flood elevations
- Other

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project location is outside the 100-year floodplain and is in an urbanized area adjacent to existing development. See attached map.

**Are formal compliance steps or mitigation required?**

Yes

No

# National Flood Hazard Layer FIRMette



37°57'53.07"N



USGS The National Map: Orthoimagery. Data refreshed October 2017. 0 250 500 1,000 1,500 2,000 Feet 1:6,000 37°57'24.71"N

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- |                                    |  |  |
|------------------------------------|--|--|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  |  | Without Base Flood Elevation (BFE)<br><i>Zone A, V, A99</i>  |
|                                    |  | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>   |
|                                    |  | Regulatory Floodway  |
| <b>OTHER AREAS OF FLOOD HAZARD</b> |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
|                                    |  | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>  |
|                                    |  | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>  |
|                                    |  | Area with Flood Risk due to Levee <i>Zone D</i>  |
| <b>OTHER AREAS</b>                 |  | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>   |
|                                    |  | Effective LOMRs  |
| <b>GENERAL STRUCTURES</b>          |  | Area of Undetermined Flood Hazard <i>Zone D</i>  |
|                                    |  | Channel, Culvert, or Storm Sewer   |
|                                    |  | Levee, Dike, or Floodwall  |
| <b>OTHER FEATURES</b>              |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation  |
|                                    |  | 17.5 Coastal Transect  |
|                                    |  | Base Flood Elevation Line (BFE)  |
|                                    |  | Limit of Study   |
|                                    |  | Jurisdiction Boundary  |
| <b>MAP PANELS</b>                  |  | Coastal Transect Baseline  |
|                                    |  | Profile Baseline   |
|                                    |  | Hydrographic Feature   |
|                                    |  | Digital Data Available   |
|                                    |  | No Digital Data Available  |
|                                    |  | Unmapped   |



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/31/2018 at 5:37:50 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



# **Attachment A7**

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Historic Preservation and Section 106

## Historic Preservation (CEST and EA)

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	<a href="#">36 CFR 800 "Protection of Historic Properties"</a>
<b>References</b>		
<a href="https://www.hudexchange.info/environmental-review/historic-preservation">https://www.hudexchange.info/environmental-review/historic-preservation</a>		

### Threshold

#### Is Section 106 review required for your project?

- No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the [PA Database](#) to find applicable PAs.)

**Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:**

→ Continue to the Worksheet Summary.

- No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

**Either provide the memo itself or a link to it here. Explain and justify the other determination here:**

→ Continue to the Worksheet Summary.

- Yes, because the project includes activities with potential to cause effects (direct or indirect). → Continue to Step 1.

### **The Section 106 Process**

After determining the need to do a Section 106 review, initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation.

Note that consultation continues through all phases of the review.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

### **Step 1 - Initiate Consultation**

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if you should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that consultants may not initiate consultation with Tribes.

#### **Select all consulting parties below (check all that apply):**

- State Historic Preservation Officer (SHPO)
- Advisory Council on Historic Preservation
- Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native
- Hawaiian Organizations (NHOs)

#### **List all tribes that were consulted here and their status of consultation:**

On October 15, 2018, voice mail messages were left for Lloyd Mathiesen, Chairperson of the Chicken Ranch Rancheria of Me-Wuk Indians, and Kevin Day, Chairperson of the Tuolumne Band of Me-Wuk Indians. Responses have not been received from either tribe. A letter was sent to SHPO on November 14, 2018 seeking concurrence. All documentation is provided in the attached cultural report.

- Other Consulting Parties

#### **List all consulting parties that were consulted here and their status of consultation:**

**Describe the process of selecting consulting parties and initiating consultation here:**

Natural Investigations Company contacted the Native American Heritage Commission (NAHC), requesting a search of their Sacred Lands File for traditional cultural resources within or near the project site. By letters dated September 4 and 28, 2018, Natural Investigations Company contacted each of the two Native American tribes provided by the NAHC, requesting any information regarding sacred lands or other heritage sites that might be affected by the project. A letter was sent to SHPO on November 14, 2018 seeking concurrence. All documentation is provided in the attached cultural report

*Provide all correspondence, notices, and notes (including comments and objections received) and continue to Step 2.*

### **Step 2 - Identify and Evaluate Historic Properties**

**Define the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE.** Attach an additional page if necessary.

See attached report

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register.

Refer to HUD's website for guidance on identifying and evaluating historic properties.

**In the space below, list historic properties identified and evaluated in the APE.**

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

none

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

**Was a survey of historic buildings and/or archeological sites done as part of the project?**

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

- Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

See attached report

- No → *Continue to Step 3.*

**Step 3 - Assess Effects of the Project on Historic Properties**

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

**Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.**

- No Historic Properties Affected

**Document reason for finding:**

- No historic properties present. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*
- Historic properties present, but project will have no effect upon them. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.4\(d\)\(1\)](#)) and consult further to try to resolve objection(s).

No Adverse Effect

**Document reason for finding:**

**Does the No Adverse Effect finding contain conditions?**

Yes

**Check all that apply:** (check all that apply)

- Avoidance
- Modification of project
- Other

**Describe conditions here:**

→ *Monitor satisfactory implementation of conditions. Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

No → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.5\(c\)\(2\)](#)) and consult further to try to resolve objection(s).

Adverse Effect

**Document reason for finding:**

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)]

Notify the Advisory Council on Historic Preservation of the Adverse Effect and provide the documentation outlined in [36 CFR 800.11\(e\)](#). The Council has 15 days to decide whether to enter the consultation (Not required for projects covered by a Programmatic Agreement).

→ *Continue to Step 4.*

#### **Step 4 - Resolve Adverse Effects**

Work with consulting parties to try to avoid, minimize or mitigate adverse effects. Refer to HUD guidance and [36 CFR 800.6 and 800.7](#).

#### **Were the Adverse Effects resolved?**

Yes

**Describe the resolution of Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation:**

**For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Provide signed Memorandum of Agreement (MOA) or Standard Mitigation Measures Agreement (SMMA). Continue to the Worksheet Summary.*

No

The project must be cancelled unless the “Head of Agency” approves it. Either provide approval from the “Head of Agency” or cancel the project at this location.

**Describe the failure to resolve Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation and “Head of the Agency”:**

**Explain in detail the exact conditions or measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Provide correspondence, comments, documentation of decision, and “Head of Agency” approval. Continue to the Worksheet Summary.*

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

HCD, as the responsible entity under NEPA, has determined that no historic properties will be affected by the proposed action. No documented archaeological or built environmental resources are known to be present within the area of potential effects (APE) for the project.

**Are formal compliance steps or mitigation required?**

Yes

No

**NATIVE AMERICAN HERITAGE COMMISSION**

Environmental and Cultural Department  
1550 Harbor Blvd., Suite 100  
West Sacramento, CA 95691  
(916) 373-3710



August 30, 2018

Cindy Arrington  
Natural Investigations

Sent by Email: [cindy@naturalinvestigations.com](mailto:cindy@naturalinvestigations.com)  
Number of Pages: 2

RE: Tuolumne NDRC Project 609, Tuolumne and Groveland, Tuolumne County

Dear Ms. Arrington:

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Sharaya Souza'.

Sharaya Souza  
Staff Services Analyst  
(916) 573-0168

**Native American Heritage Commission  
Native American Consultation List  
8/28/2018**

Chicken Ranch Rancheria of Me-Wuk Indians  
Lloyd Mathiesen, Chairperson  
P.O. Box 1159                      Miwok - Me-wuk  
Jamestown                      , CA 95327  
mralston@crtribal.com  
(209) 984-9066  
(209) 984-9269

Tuolumne Band of Me-Wuk Indians  
Kevin Day, Chairperson  
P.O. Box 699                      Me-Wuk - Miwok  
Tuolumne                      , CA 95379  
receptionist@mewuk.com  
(209) 928-5300 Office  
(209) 928-1677 Fax

**This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.**

**Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Code, or Section 5097.98 of the Public Resources Code.**

**This list is only applicable for contacting local Native American Tribes for the proposed:  
Tuolumne NDRC Project 609, Tuolumne and Groveland, Tuolumne County.**



**Natural  
Investigations  
Company**

September 28, 2018

Tuolumne Band of Me-Wuk Indians  
Kevin Day, Chairperson  
P.O. Box 699  
Tuolumne, CA 95379

Dear Mr. Day:

Natural Investigations Company, Inc. (Natural Investigations) was retained to provide cultural resources services for the Tuolumne County National Disaster Resilience Competition (NDRC) project in Tuolumne County. The Rim Fire in 2013, made possible a NDRC grant that allows Tuolumne County to design and construct community resilience centers to help rebuild and increase the community resilience for future disasters. The County selected two areas in which to review for the construction of the resilience centers. One in Groveland, near Ferretti Road and another in Tuolumne, near Bay Avenue.

Figure 1 shows the location of the proposed Groveland Community Resilience Center in Sections 16 and 21 of Township 1 South, Range 16 East, as depicted on the 2001 Groveland USGS 7.5-minute topographic map (Mount Diablo Base and Meridian). Figure 2 shows the location of the proposed Tuolumne Community Resilience Center in Section 8 of Township 1 North, Range 16 East, as depicted on the 2001 Tuolumne USGS 7.5-minute topographic map (Mount Diablo Base and Meridian).

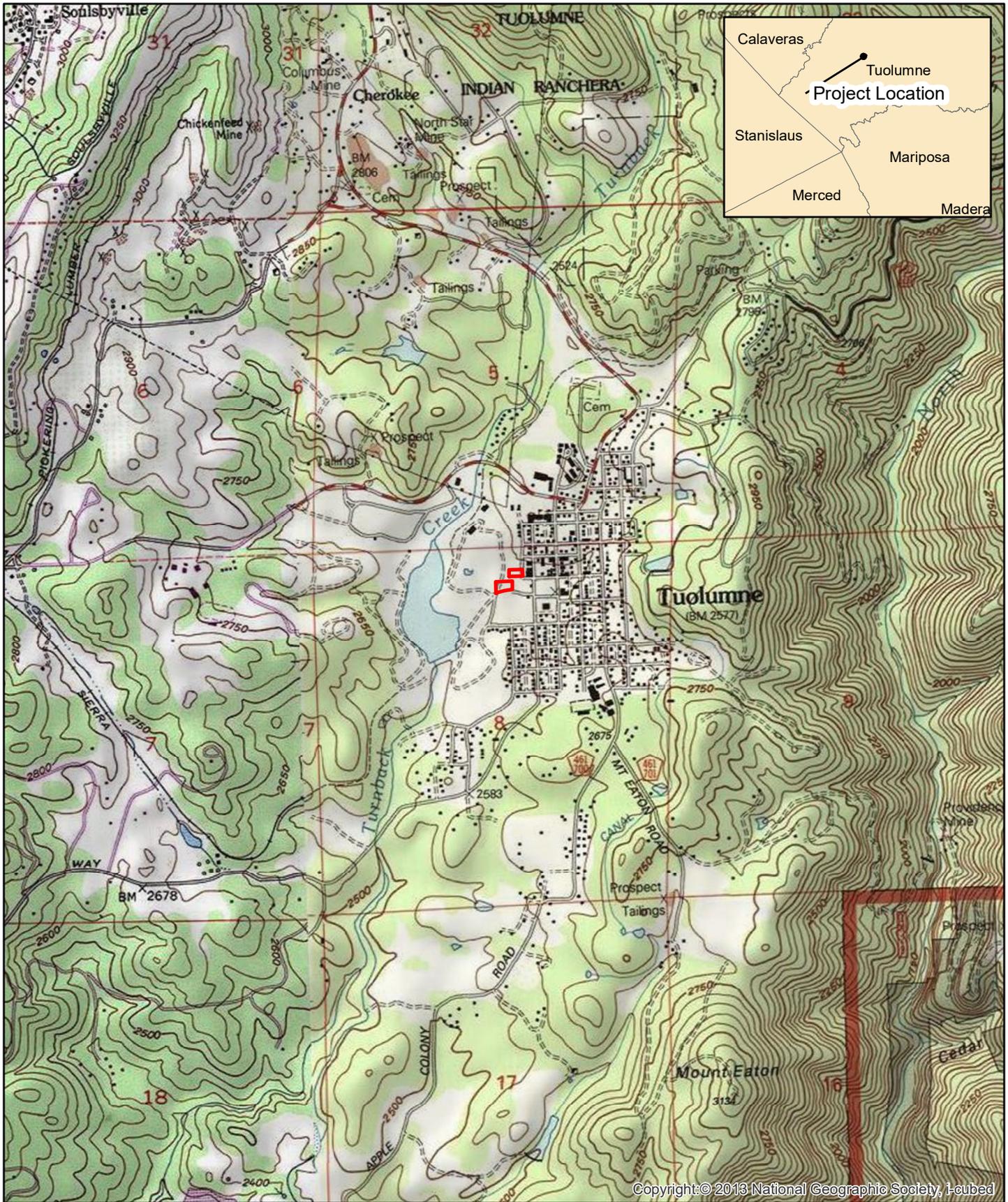
The Native American Heritage Commission (NAHC) responded on August 30, 2018 to a request for a search of their Sacred Lands File, stating that their search does not indicate the presence of Native American cultural resources in the immediate vicinity of the project. The NAHC also provided a list of tribes and individuals that may have knowledge of traditional lands or cultural places located within or near the project, and recommended that we contact you, among others.

We would appreciate you providing any comments, issues, or concerns relating to cultural resources in the project area or regarding the project. All information provided regarding specific sites or tribal cultural resources will remain confidential. Please contact me by phone (916-765-9381) or email ([cindy@naturalinvestigations.com](mailto:cindy@naturalinvestigations.com)). Your response within two weeks of receipt of this letter will be appreciated. Thank you for your assistance.

Respectfully submitted,

Cindy Arrington, M.S., RPA  
Principal  
Natural Investigations Company

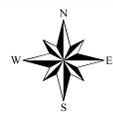
Attachment: Figure 1 & 2



 Project Location

0 0.5 1 Kilometers

0 0.5 1 Miles

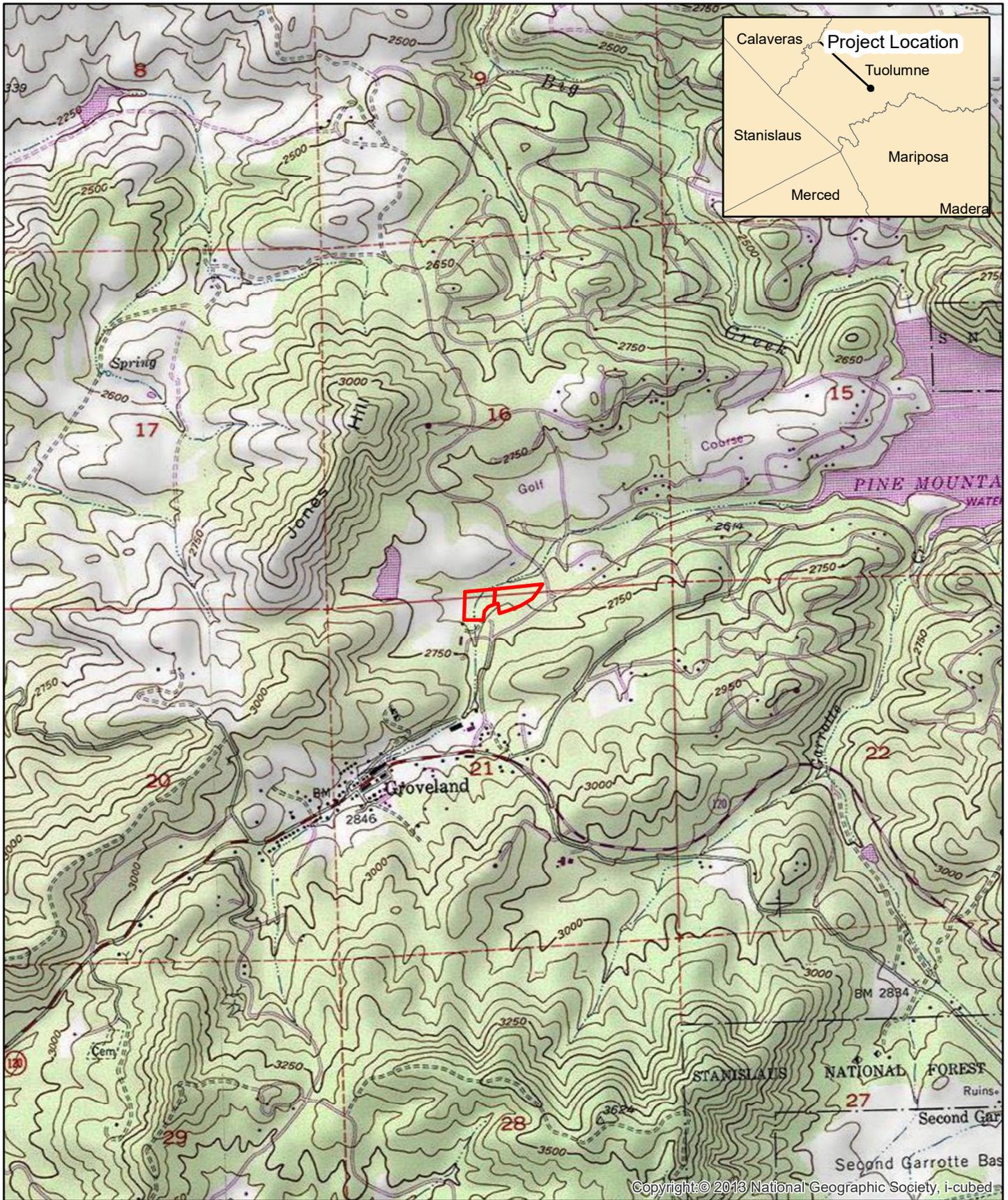


1:24,000

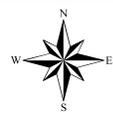
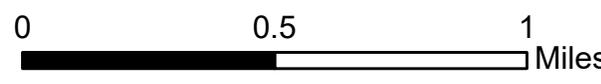
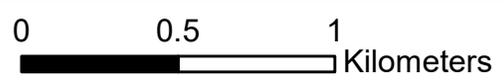
Tuolumne NDRC  
Figure 2- Project Location



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COMPANY



 Project Location



1:24,000

Groveland NDRC  
Figure 1 - Project Location



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INVESTIGATIONS  
COMPANY



**Natural  
Investigations  
Company**

September 28, 2018

Chicken Ranch Rancheria of Me-Wuk Indians  
Lloyd Mathiesen, Chairperson  
P.O. Box 1159  
Jamestown, CA 95327

Dear Mr. Mathiesen:

Natural Investigations Company, Inc. (Natural Investigations) was retained to provide cultural resources services for the Tuolumne County National Disaster Resilience Competition (NDRC) project in Tuolumne County. The Rim Fire in 2013, made possible a NDRC grant that allows Tuolumne County to design and construct community resilience centers to help rebuild and increase the community resilience for future disasters. The County selected two areas in which to review for the construction of the resilience centers. One in Groveland, near Ferretti Road and another in Tuolumne, near Bay Avenue.

Figure 1 shows the location of the proposed Groveland Community Resilience Center in Sections 16 and 21 of Township 1 South, Range 16 East, as depicted on the 2001 Groveland USGS 7.5-minute topographic map (Mount Diablo Base and Meridian). Figure 2 shows the location of the proposed Tuolumne Community Resilience Center in Section 8 of Township 1 North, Range 16 East, as depicted on the 2001 Tuolumne USGS 7.5-minute topographic map (Mount Diablo Base and Meridian).

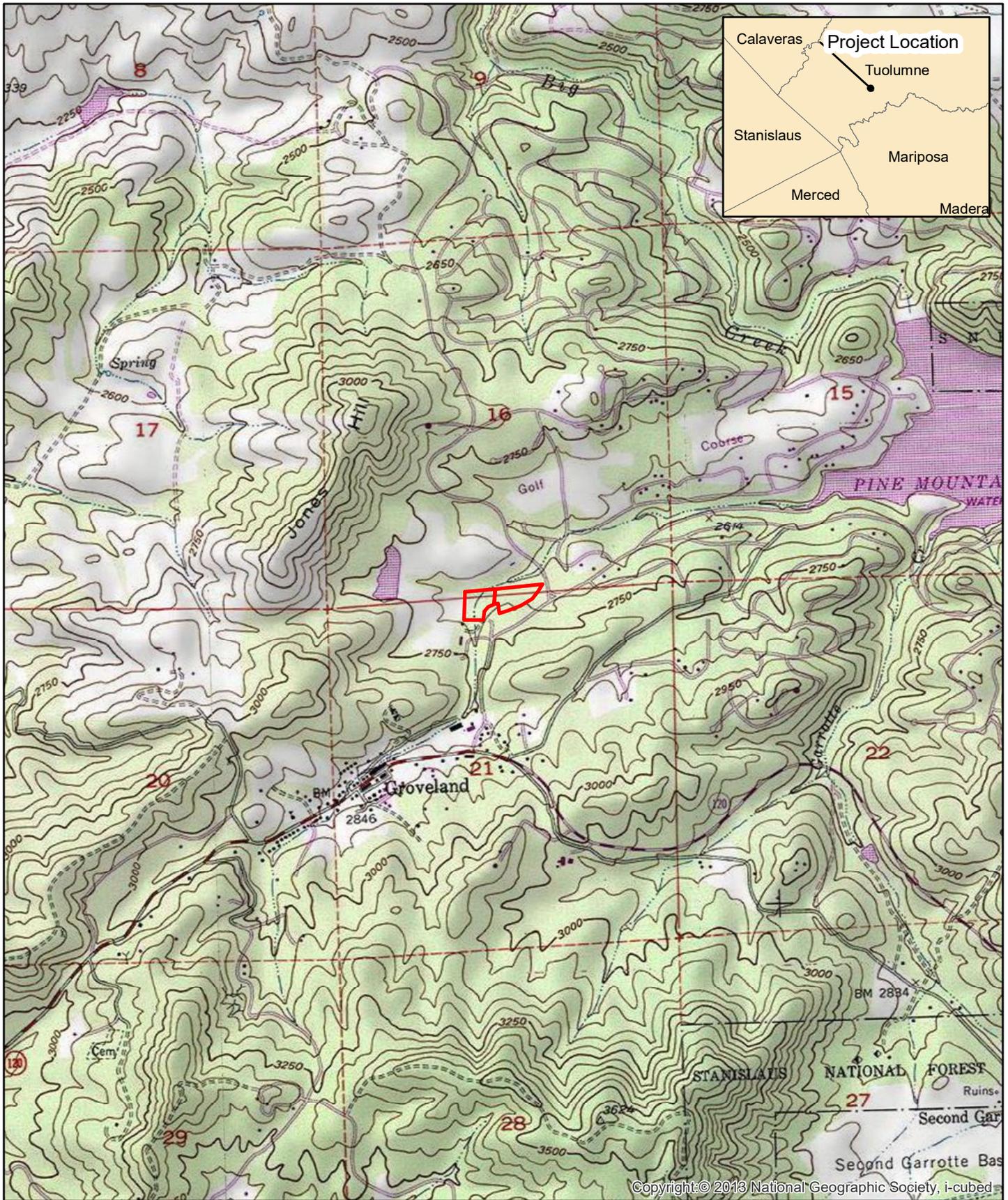
The Native American Heritage Commission (NAHC) responded on August 30, 2018 to a request for a search of their Sacred Lands File, stating that their search does not indicate the presence of Native American cultural resources in the immediate vicinity of the project. The NAHC also provided a list of tribes and individuals that may have knowledge of traditional lands or cultural places located within or near the project, and recommended that we contact you, among others.

We would appreciate you providing any comments, issues, or concerns relating to cultural resources in the project area or regarding the project. All information provided regarding specific sites or tribal cultural resources will remain confidential. Please contact me by phone (916-765-9381) or email ([cindy@naturalinvestigations.com](mailto:cindy@naturalinvestigations.com)). Your response within two weeks of receipt of this letter will be appreciated. Thank you for your assistance.

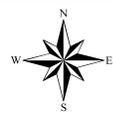
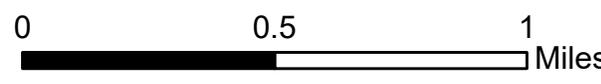
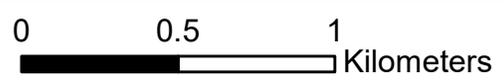
Respectfully submitted,

Cindy Arrington, M.S., RPA  
Principal  
Natural Investigations Company

Attachment: Figure 1 & 2



 Project Location



1:24,000

Groveland NDRC  
Figure 1 - Project Location

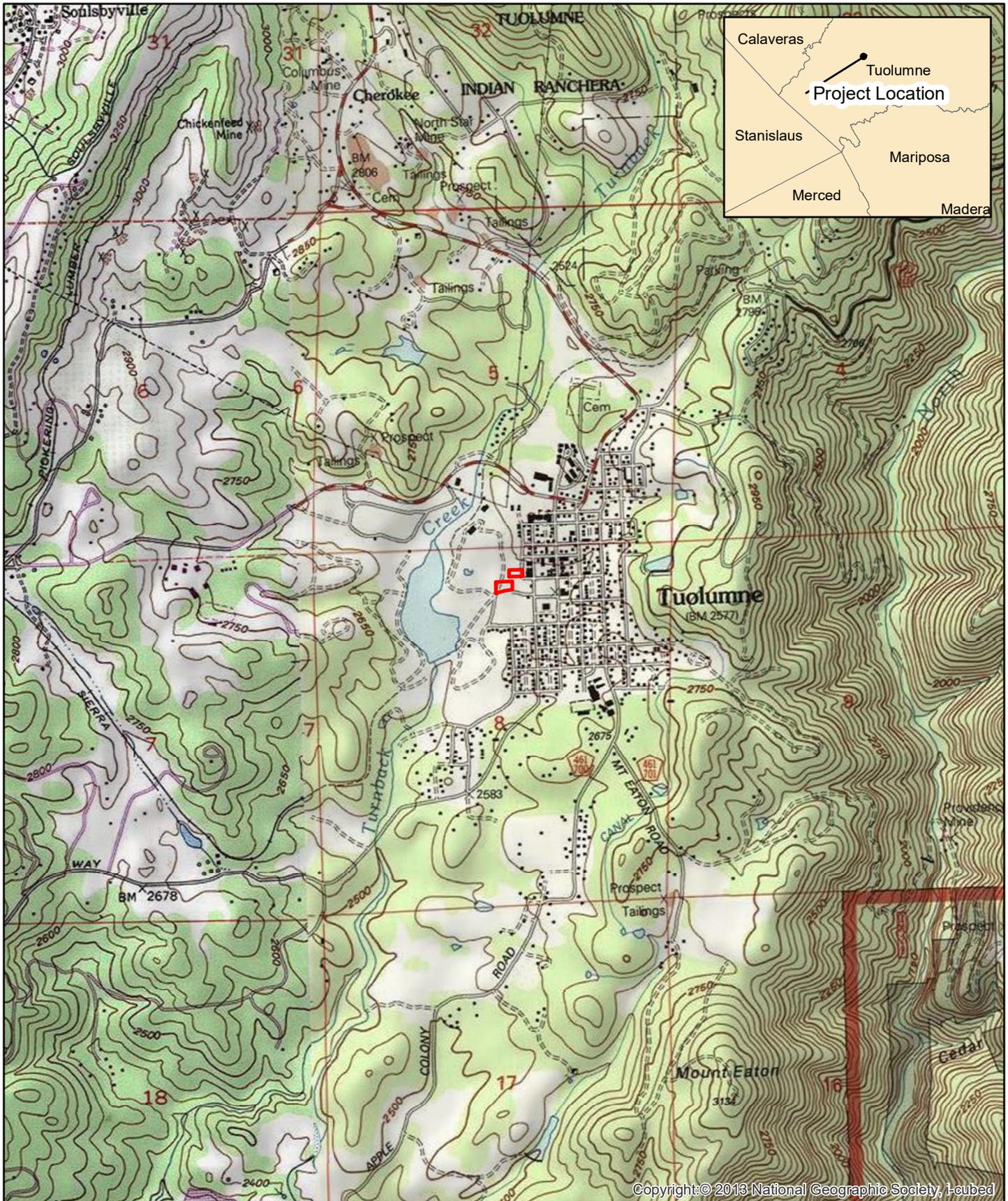


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COMPANY



**Native American Contact Tracking Sheet  
Tuolumne County NDRC Project  
Tuolumne County, CA**

Contact Name	Date Letter Sent	Date of Follow Up	Comments/Concerns/ Recommendations
Chicken Ranch Rancheria of Me-Wuk Indians Lloyd Mathiesen, Chairperson P.O. Box 1159 Jamestown, CA 95327 209-984-9066	9-4-2018	9-20-2018	Mr. Mathiesen was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
		9-28-2018	At the request of the County, the information letters and map were sent to Mr. Mathiesen via certified mail.
		10-1-2018	The certified letter was received and signed for by Carmel Poff at 12:53 PM on October 1, 2018.
		10-15-2018	Mr. Mathiesen was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
		10-26-2018	After the initial call/voicemail no response has been received.
Tuolumne Band of Me-Wuk Indians Kevin Day, Chairperson P.O. Box 699 Tuolumne, CA 95379 209-928-5300	9-4-2018	9-20-2018	Mr. Day was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
		9-28-2018	At the request of the County, the information letters and map were sent to Mr. Day via certified mail.
		10-1-2018	The certified letter was received and signed for by Paula Gaisen at 11:16 AM on October 1, 2018.
		10-15-2018	Mr. Day was not available. A voice message was left asking if the Tribe had any questions or concerns regarding the project and if so, to please contact Natural Investigations.
		10-26-2018	After the initial call/voicemail no response has been received.



 Project Location



1:24,000

Tuolumne NDRC  
 Figure 2- Project Location



7018 1130 0000 7150 0612 2020

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JAMESTOWN, CA 95327

Certified Mail Fee	\$3.45
\$	\$0.00
Extra Services & Fees (check box, add fee as appropriate)	\$11.50
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input checked="" type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$0.50
\$	\$
<b>Total Postage and Fees</b>	<b>\$5.45</b>
\$	\$

0816  
68

Postmark Here  
**SEP 28 2018**

POST OFFICE, SACRAMENTO, CA  
09/28/2018  
95816 - US

Sent To  
Kalyd Mathiesen - C.R. Rancheria  
Street and Apt. No., or PO Box No.  
P.O. Box 1159  
City, State, ZIP+4®  
Jamestown, CA 95327

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 1130 0000 7150 0612 2020

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Certified Mail Fee	\$3.45
\$	\$0.00
Extra Services & Fees (check box, add fee as appropriate)	\$11.50
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input checked="" type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$0.50
\$	\$
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\$	\$

0816  
68

Postmark Here  
**SEP 28 2018**

POST OFFICE, SACRAMENTO, CA  
09/28/2018  
95816 - US

Sent To  
Kevin Day - Tuolumne Band  
Street and Apt. No., or PO Box No.  
P.O. Box 699  
City, State, ZIP+4®  
Tuolumne, CA 95379

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



October 1, 2018

Dear Cindy Arrington:

The following is in response to your request for proof of delivery on your item with the tracking number:  
**7018 1130 0000 7150 0602.**

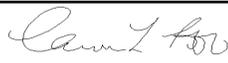
### Item Details

<b>Status:</b>	Delivered
<b>Status Date / Time:</b>	October 1, 2018, 12:53 pm
<b>Location:</b>	JAMESTOWN, CA 95327
<b>Postal Product:</b>	First-Class Mail®
<b>Extra Services:</b>	Certified Mail™ Return Receipt Electronic

### Shipment Details

<b>Weight:</b>	1.0oz
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### Recipient Signature

Signature of Recipient:	
Address of Recipient:	1159

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely,  
United States Postal Service®  
475 L'Enfant Plaza SW  
Washington, D.C. 20260-0004



October 1, 2018

Dear Cindy Arrington:

The following is in response to your request for proof of delivery on your item with the tracking number:  
**7018 1130 0000 7150 0619.**

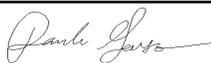
#### Item Details

<b>Status:</b>	Delivered
<b>Status Date / Time:</b>	October 1, 2018, 11:16 am
<b>Location:</b>	TUOLUMNE, CA 95379
<b>Postal Product:</b>	First-Class Mail®
<b>Extra Services:</b>	Certified Mail™ Return Receipt Electronic

#### Shipment Details

<b>Weight:</b>	1.0oz
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#### Recipient Signature

Signature of Recipient:	
Address of Recipient:	699

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely,  
United States Postal Service®  
475 L'Enfant Plaza SW  
Washington, D.C. 20260-0004

# **Attachment A8**

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Sole Source Aquifers

## Sole Source Aquifers (CEST and EA)

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149
Reference		
<a href="https://www.hudexchange.info/environmental-review/sole-source-aquifers">https://www.hudexchange.info/environmental-review/sole-source-aquifers</a>		

**1. Does your project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?**

- Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*
- No → *Continue to Question 2.*

**2. Is the project located on a sole source aquifer (SSA)<sup>1</sup>?**

- No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area.*
- Yes → *Continue to Question 3.*

**3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?**

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

- Yes → *Provide the MOU or agreement as part of your supporting documentation. Continue to Question 4.*
- No → *Continue to Question 5.*

**4. Does your MOU or working agreement exclude your project from further review?**

- Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

---

<sup>1</sup> A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

No → Continue to Question 5.

**5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?**

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.

Yes → Work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.

**6. In order to continue with the project, any threat must be mitigated, and all mitigation must be approved by the EPA. Explain in detail the proposed measures that can be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

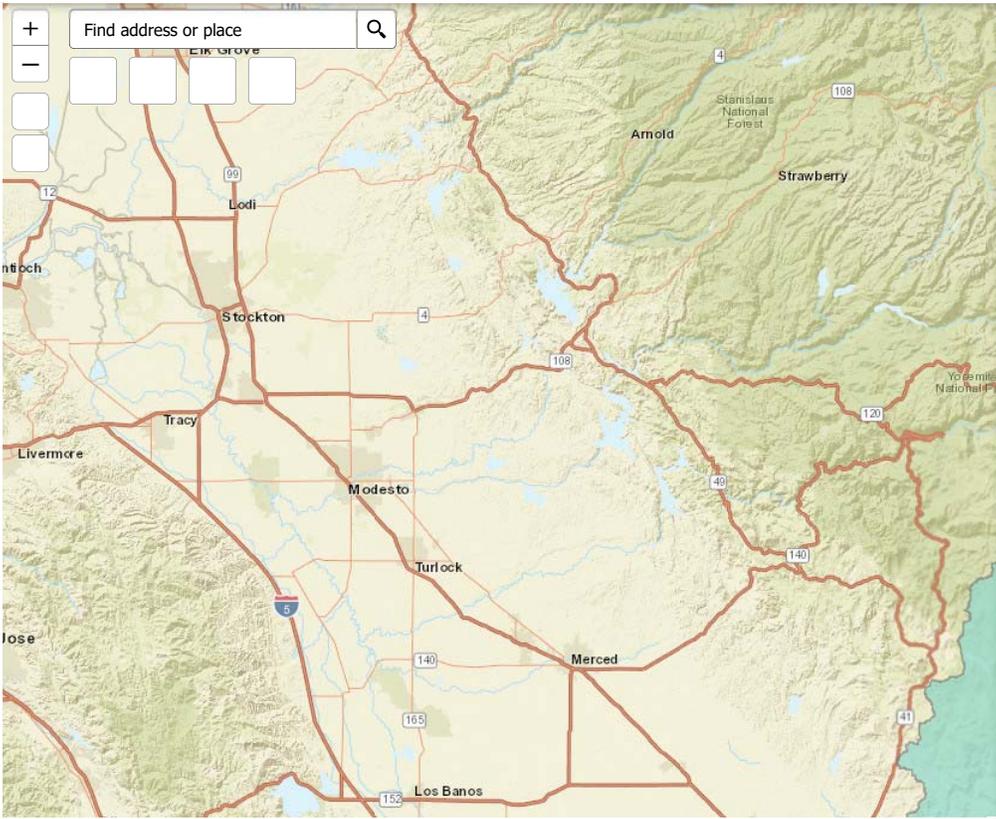
There are no sole source aquifers located in Tuolumne County. See attached map.

**Are formal compliance steps or mitigation required?**

Yes

No

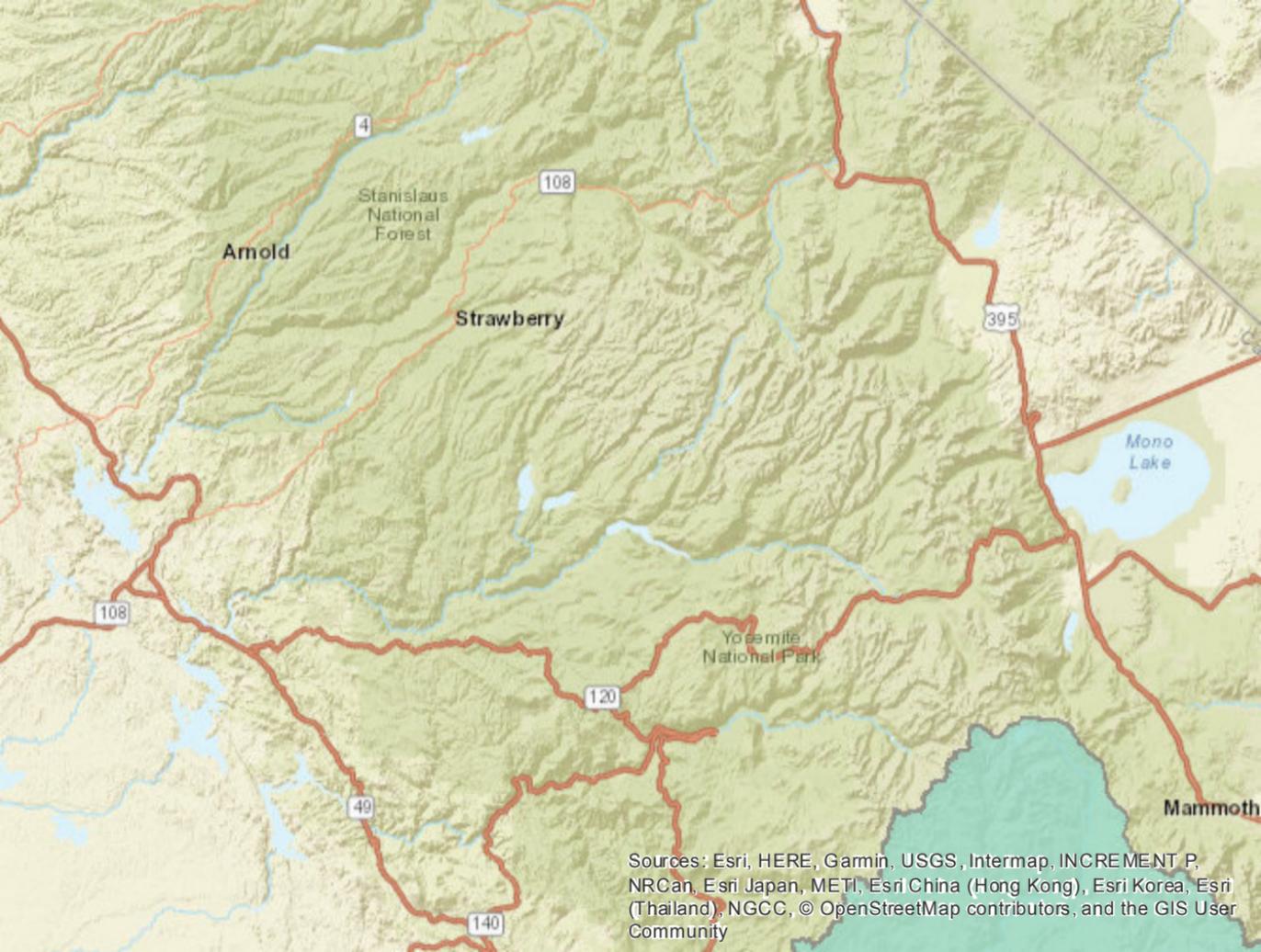
### Sole Source Aquifers



**Legend**

- Sole Source Aquifers - Labels
- Sole Source Aquifers

20mi  
-117.718 38.503 Degrees



Arnold

Stanislaus  
National  
Forest

Strawberry

Yosemite  
National Park

Mono  
Lake

Mammoth

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

# **Attachment A9**

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Wild and Scenic Rivers

## Wild and Scenic Rivers (CEST and EA)

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297
References		
<a href="https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers">https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers</a>		

### 1. Is your project within proximity of a NWSRS river as defined below?

**Wild & Scenic Rivers:** These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational

**Study Rivers:** These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.

**Nationwide Rivers Inventory (NRI):** The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

→ Continue to Question 2.

### 2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Continue to Question 3.*

- 3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project involves construction and operation of a resilience center located approximately 4.5 miles north of the Tuolumne River, but would not disturb existing river resources or obscure sights of the rivers in any way. See attached for additional information.

**Are formal compliance steps or mitigation required?**

Yes

No



### TUOLUMNE RIVER, CALIFORNIA



[+ View larger map](#)

Choose A State

Choose A River

*While progress should never come to a halt, there are many places it should never come to at all. — Paul Newman*

**Managing Agency:**

Bureau of Land Management, Mother Lode Field Office  
National Park Service, Yosemite National Park  
U.S. Forest Service, Stanislaus National Forest

**Designated Reach:**

September 28, 1984. The main stem from its source to the Don Pedro Reservoir.

**Classification/Mileage:**

Wild — 47.0 miles; Scenic — 23.0 miles; Recreational — 13.0 miles; Total — 83.0 miles.



**RELATED LINKS**

- [Yosemite National Park \(National Park Service\)](#)
- [Tuolumne River \(U.S. Forest Service\)](#)
- [Tuolumne River Management Plan](#)

*Photo Credit: Michael Carl*

The Tuolumne River, designated in 1984, originates high in the Sierra Nevada on the eastern side of Yosemite National Park and flows westward for 62 miles before it continues into Stanislaus National Forest. The river has two principal sources: 1) the Dana Fork, which drains the west-facing slopes of Mount Dana; and 2) the Lyell Fork, which begins at the base of the glacier on Mount Lyell. The two forks converge at the eastern end of Tuolumne Meadows, one of the largest subalpine meadows in the Sierra Nevada. The Tuolumne River meanders through Tuolumne Meadows and then cascades through the Grand Canyon of the Tuolumne before it enters the eastern end of Hetch Hetchy Reservoir (still within the park, but not part of the National Wild and Scenic Rivers System). Below O'Shaughnessy Dam, the river again is included in the National Wild and Scenic Rivers System as it continues through a low-elevation meadow and rocky gorge.

### ***Outstandingly Remarkable Values***

#### ***Cultural & Historic***

The rich archeological landscape along the Tuolumne River reflects thousands of years of travel, settlement and trade. Parsons Memorial Lodge, a national historic landmark sited near the Tuolumne River, commemorates the significance of this free-flowing segment of the river in inspiring conservation activism and protection of the natural world on a national scale.

#### ***Fisheries & Wildlife Habitat***

In Tuolumne Meadows, Dana Meadows and along the Lyell Fork, the Tuolumne River sustains one of the most extensive Sierra Nevada complexes of subalpine meadows and riparian habitats with relatively high biological integrity. Poopenaut Valley contains a type of low-elevation riparian and wetland habitat that is rare in the Sierra Nevada.

#### ***Geologic***

Rock types of the upper Tuolumne River are chiefly granites; three major intrusive periods in the development of the Sierra Nevada have contributed different granitic varieties. Metamorphic remnants occur at higher elevations, such as the slate of Mt. Lyell and the limestone of Mt. Dana. Visitors can witness volcanic rocks at Tuolumne Meadows and glacial deposits at Lumsden Campground. Below Early Intake, granites have weathered, and at the South Fork confluence, they give way to Calaveras Formation metasedimentary rock. Schists and slates with limestone bands characterize the rocks of the lower Tuolumne River, and gold occurs in this metamorphic belt, as well.

#### ***Recreational***

The unique recreational feature of the Lower Tuolumne is whitewater boating. The section from Lumsden Bridge to Wards Ferry provides one of the finest boating experiences in the nation. It combines a series of demanding rapids spaced at close intervals with the power and waves of larger rivers and requires no portages during the 18-mile run.

#### ***Scenic***

Lyell Canyon offers remarkable and varied views of lush meadows, a meandering river, a U-shaped glacially carved canyon and surrounding peaks. The Grand Canyon of the Tuolumne offers views of a deep, rugged canyon with vast escarpments of granite, hanging valleys and long cascades of falling water.

[NATIONWIDE RIVERS INVENTORY](#) | [CONTACT US](#) | [PRIVACY NOTICE](#) | [Q & A SEARCH ENGINE](#) | [SITE MAP](#)



#### **Designated Rivers**

[About WSR Act](#)  
[State Listings](#)  
[Profile Pages](#)

#### **National System**

[WSR Table](#)  
[Study Rivers](#)  
[Stewardship](#)  
[WSR Legislation](#)

#### **River Management**

[Council](#)  
[Agencies](#)  
[Management Plans](#)  
[River Mgt. Society](#)  
[GIS Mapping](#)

#### **Resources**

[Q & A Search](#)  
[Bibliography](#)  
[Publications](#)  
[GIS Mapping](#)  
[Logo & Sign Standards](#)

# **Attachment A10**

---

Environmental Justice

## Environmental Justice (CEST and EA)

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	
References		
<a href="https://www.hudexchange.info/environmental-review/environmental-justice">https://www.hudexchange.info/environmental-review/environmental-justice</a>		

**HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.**

**1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?**

Yes → *Continue to Question 2.*

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

**2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?**

Yes

**Explain:**

→ *Continue to Question 3. Provide any supporting documentation.*

No

**Explain:**

→ *Continue to the Worksheet Summary and provide any supporting documentation.*

3. All adverse impacts should be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Mitigation as follows will be implemented:

→ Continue to Question 4.

No mitigation is necessary.

**Explain why mitigation will not be made here:**

→ Continue to Question 4.

4. Describe how the affected low-income or minority community was engaged or meaningfully involved in the decision on what mitigation actions, if any, will be taken.

→ Continue to the Worksheet Summary and provide any supporting documentation.

## **Worksheet Summary**

### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project provides a community center with various amenities including education facilities, meeting and storage space, shelter space, and outdoor activity area. The community center would be available to the public to serve the surrounding community. No adverse environmental impacts were identified in the project's total environmental review that could expose any existing community to adverse environmental conditions (e.g., pollution, hazards). The project is in compliance with Executive Order 12898.

**Are formal compliance steps or mitigation required?**

- Yes  
 No

# **Attachment A11**

---

Explosive and Flammable Facilities

## Explosive and Flammable Hazards (CEST and EA)

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C
<b>Reference</b>		
<a href="https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities">https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities</a>		

**1. Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

No

→ Continue to Question 2.

Yes

**Explain:**

→ Continue to Question 5.

**2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes

→ Continue to Question 3.

**3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers:**

- Of more than 100 gallon capacity, containing common liquid industrial fuels OR
- Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.

Yes

→ Continue to Question 4.

**4. Is the Separation Distance from the project acceptable based on standards in the Regulation?**

Please visit HUD's website for information on calculating Acceptable Separation Distance.

Yes

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank."

No

→ Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank." Continue to Question 6.

**5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

Please visit HUD's website for information on calculating Acceptable Separation Distance.

Yes

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

No

→ Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations. Continue to Question 6.

**6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.**

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an

unacceptable separation distance, provide approval from a licensed professional engineer.

**Worksheet Summary**

**Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The project location is in an urban area where no bulk handling facilities for fuels or chemicals exist either within the project area or in the vicinity. If any hazardous material were discovered it would be removed and disposed of in accordance with California Health and Safety Code, Chapter 6.5, Division 20; California Administration Code, Title 22, relating to Handling, Storage, and Treatment of Hazardous Materials; 29 Code of Federal Regulation 1910.120 relating to Hazardous Waste Operation Safety Training.

**Are formal compliance steps or mitigation required?**

- Yes
- No

# **Attachment A12**

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Noise Abatement and Control

## Noise (EA Level Reviews)

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972  General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B
<b>References</b>		
<a href="https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control">https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control</a>		

### 1. What activities does your project involve? Check all that apply:

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

→ *Continue to Question 2.*

- Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

→ *Continue to Question 2.*

- A research demonstration project which does not result in new construction or reconstruction, interstate, land sales registration, or any timely emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

- None of the above

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

**2. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**

**Indicate the findings of the Preliminary Screening below:**

There are no noise generators found within the threshold distances above.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.*

Noise generators were found within the threshold distances.

→ *Continue to Question 3.*

**3. Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:**

Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

**Indicate noise level here:**

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.*

Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

**Indicate noise level here:**

If project is rehabilitation:

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis.*

If project is new construction:

**Is the project in a largely undeveloped area<sup>1</sup>?**

No

→ *Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.*

---

<sup>1</sup> A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses and does not have water and sewer capacity to serve the project.

Yes

→ Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Elevate this review to an EIS-level review.

Unacceptable: (Above 75 decibels)

Indicate noise level here:

If project is rehabilitation:

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels. Consider converting this property to a non-residential use compatible with high noise levels.

→ Continue to Question 4. Provide noise analysis, including noise level and data used to complete the analysis, and any other relevant information.

If project is new construction:

**Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). You may either complete an EIS or provide a waiver signed by the appropriate authority. Indicate your choice:**

Convert to an EIS

→ Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

Provide waiver

→ Provide an Environmental Impact Statement waiver from the Certifying Officer or the Assistant Secretary for Community Planning and Development per 24 CFR 51.104(b)(2) and noise analysis, including noise level and data used to complete the analysis.

Continue to Question 4.

- 4. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.**

Mitigation as follows will be implemented:

→ Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures. Continue to the Worksheet Summary.

No mitigation is necessary.

**Explain why mitigation will not be made here:**

→ Continue to the Worksheet Summary.

### **Worksheet Summary**

#### **Compliance Determination**

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

HUD does not address construction noise but does encourage the use of quieter construction equipment and methods in population centers. In addition, HUD noise regulations are intended to protect new residential properties from being placed in areas that could result in excessive noise exposure. As discussed in the Environmental Assessment, project construction would occur during the less sensitive daytime hours. Further, the project does not propose residential land uses or the rehabilitation of an existing residential property. The project would construct and operate a community resilience center in a commercial zone. In times of emergency, people could potentially use the building and associated space for temporary shelter. However, the primary use would not be residential, and emergencies are temporary. Therefore, the project would not result in the placement of any new residences in Unacceptable zones. No mitigation is necessary.

**Are formal compliance steps or mitigation required?**

- Yes  
 No

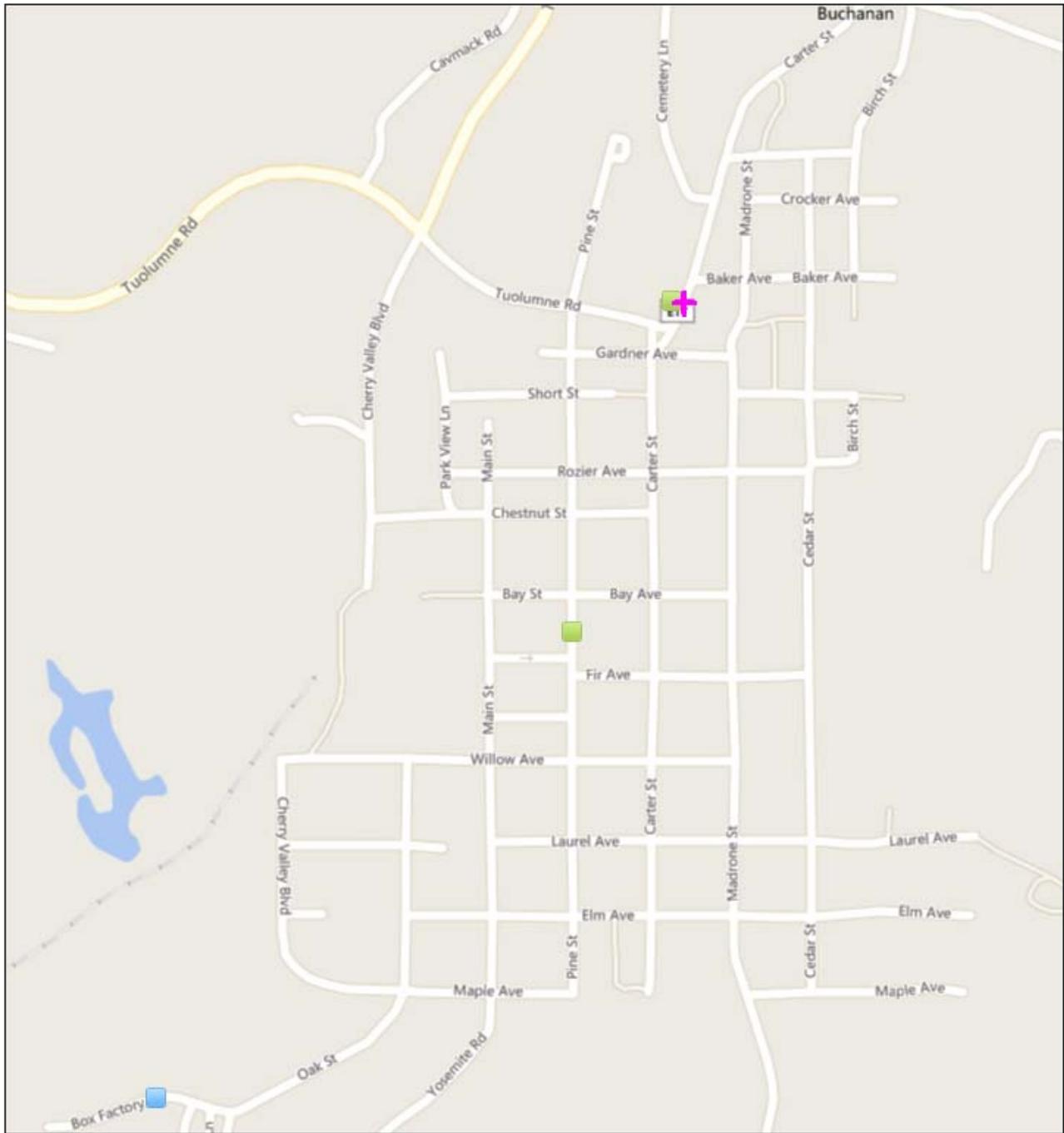


# **Appendix B**

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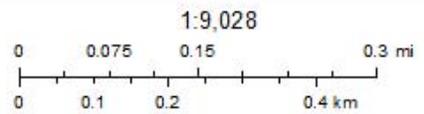
Contamination and Toxic Substances

# Tuolumne Site: EPA Facilities



November 12, 2018

-  PCS (single)
-  Search Result (point)
-  RCRAINFO (single)



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# Detailed Facility Report

## Facility Summary

**ALLTEL TUOLUMNE TELEPHONE CO**  
**TUOLUMNE, CA 95379** ⓘ

FRS (Facility Registry Service) ID: 110002611488  
 EPA Region: 09  
 Latitude: 37.960899  
 Longitude: -120.23742  
 Locational Data Source: FRS  
 Industry: No description found  
 Indian Country: N

## Enforcement and Compliance Summary ⚠️

Statute	RCRA
Insp (5 Years)	--
Date of Last Inspection	--
<b>Current Compliance Status</b>	<b>No Violation</b>
Qtrs with NC (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

## Regulatory Information

Clean Air Act (CAA): No Information  
 Clean Water Act (CWA): No Information  
 Resource Conservation and Recovery Act (RCRA): Active (H ) SQG (CA0000036509)  
 Safe Drinking Water Act (SDWA): No Information

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110002611488					N	37.960899	-120.23742
RCR	RCRA	CA0000036509	SQG	Active (H)			N	37.961025	-120.237381

### Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110002611488	ALLTEL TUOLUMNE TELEPHONE CO	18619 PINE ST, TUOLUMNE, CA 95379
RCR	RCRA	CA0000036509	ALLTEL TUOLUMNE TELEPHONE CO	18619 PINE ST, TUOLUMNE, CA 95379

### Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Desc
No data records returned			

### Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
No data records returned			

### Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Chicken Ranch Off-Reservation Trust Land	Chicken Ranch Rancheria of Me-Wuk Indians of California	100000042	11.64
Chicken Ranch Rancheria	Chicken Ranch Rancheria of Me-Wuk Indians of California	100000042	11.84
Tuolumne Rancheria	Tuolumne Band of Me-Wuk Indians of the Tuolumne Rancheria of California	100000310	.5

## Enforcement and Compliance

### Compliance Monitoring History (5 years)

Statute	Source ID	System	Inspection Type	Lead Agency	Date	Finding
No data records returned						

Entries in italics are not considered inspections in official counts.

## Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	CA0000036509	No	11/10/2018	0	11/09/2018

## Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
<b>RCRA (Source ID: CA0000036509)</b>		01/01-03/31/16	04/01-06/30/16	07/01-09/30/16	10/01-12/31/16	01/01-03/31/17	04/01-06/30/17	07/01-09/30/17	10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18
RCRA	Facility-Level Status												

## Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
No data records returned					

## Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
No data records returned														

## Environmental Conditions

### Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Waterbody Name (ICIS (Integrated Compliance Information System))	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
No data records returned									

### Waterbody Designated Uses

Reach Code	Waterbody Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
No data records returned							

### Air Quality

Nonattainment Area?	Pollutant(s)	Applicable Nonattainment Standard(s)
Yes	Ozone	8-Hour Ozone (1997), 8-Hour Ozone (2015)
No	Lead	
No	Particulate Matter	
No	Carbon Monoxide	
No	Nitrogen Dioxide	
No	Sulfur Dioxide	

# Pollutants

## Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Releases
No data records returned								

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

# Demographic Profile

## Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	100%	Households in Area:	2,593
Center Latitude:	37.960899	Water Area:	0%	Housing Units in Area:	2,880
Center Longitude:	-120.23742	Population Density:	229/sq.mi.	Households on Public Assistance:	120
Total Persons:	6,466	Percent Minority:	17%	Persons Below Poverty Level:	2,463

Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	5,696 (88%)	Child 5 years and younger:	331 (5%)
African-American:	25 (0%)	Minors 17 years and younger:	1,412 (22%)
Hispanic-Origin:	636 (10%)	Adults 18 years and older:	5,054 (78%)
Asian/Pacific Islander:	60 (1%)	Seniors 65 years and older:	1,046 (16%)
American Indian:	296 (5%)		
Other/Multiracial:	389 (6%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown	Households (%)
Less than 9th Grade:	64 (1.5%)	Less than \$15,000:	236 (9.31%)
9th through 12th Grade:	324 (7.6%)	\$15,000 - \$25,000:	277 (10.93%)
High School Diploma:	1,359 (31.88%)	\$25,000 - \$50,000:	868 (34.24%)
Some College/2-yr:	2,012 (47.2%)	\$50,000 - \$75,000:	450 (17.75%)
B.S./B.A. or More:	504 (11.82%)	Greater than \$75,000:	704 (27.77%)

# Detailed Facility Report

## Facility Summary

**TUOLOMNE CHEVRON**  
**TUOLOMNE CITY, CA 95379** ⓘ

FRS (Facility Registry Service) ID: 110063994600  
 EPA Region: 09  
 Latitude: 37.9647  
 Longitude: -120.23595  
 Locational Data Source: FRS  
 Industry: Gasoline Stations  
 Indian Country: N

## Enforcement and Compliance Summary ⚠️

Statute	RCRA
Insp (5 Years)	--
Date of Last Inspection	--
<b>Current Compliance Status</b>	<b>No Violation</b>
Qtrs with NC (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

## Regulatory Information

Clean Air Act (CAA): No Information  
 Clean Water Act (CWA): No Information  
 Resource Conservation and Recovery Act (RCRA): Active (H ) LQG (CAL000076649)  
 Safe Drinking Water Act (SDWA): No Information

## Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

## Facility/System Characteristics

### Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110063994600					N	37.9647	-120.23595
RCR	RCRA	CAL000076649	LQG	Active (H)			N		

### Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110063994600	TUOLOMNE CHEVRON	18848 CARTER ST, TUOLOMNE CITY, CA 95379
RCR	RCRA	CAL000076649	TUOLOMNE CHEVRON	18848 CARTER ST, TUOLOMNE CITY, CA 95379

### Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Desc
No data records returned			

### Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
RCR	CAL000076649	44719	Other Gasoline Stations

### Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
Chicken Ranch Rancheria	Chicken Ranch Rancheria of Me-Wuk Indians of California	100000042	11.97
Chicken Ranch Off-Reservation Trust Land	Chicken Ranch Rancheria of Me-Wuk Indians of California	100000042	11.77
Tuolumne Rancheria	Tuolumne Band of Me-Wuk Indians of the Tuolumne Rancheria of California	100000310	.27

## Enforcement and Compliance

### Compliance Monitoring History (5 years)

Statute	Source ID	System	Inspection Type	Lead Agency	Date	Finding
No data records returned						

Entries in italics are not considered inspections in official counts.

## Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	CAL000076649	No	11/10/2018	0	11/09/2018

## Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
<b>RCRA (Source ID: CAL000076649)</b>													
RCRA	Facility-Level Status												

## Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
No data records returned					

## Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
No data records returned														

## Environmental Conditions

### Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Waterbody Name (ICIS (Integrated Compliance Information System))	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
No data records returned									

### Waterbody Designated Uses

Reach Code	Waterbody Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
No data records returned							

### Air Quality

Nonattainment Area?	Pollutant(s)	Applicable Nonattainment Standard(s)
Yes	Ozone	8-Hour Ozone (1997), 8-Hour Ozone (2015)
No	Lead	
No	Particulate Matter	
No	Carbon Monoxide	
No	Nitrogen Dioxide	
No	Sulfur Dioxide	

# Pollutants

## Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Releases
No data records returned								

## Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

# Demographic Profile

## Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	100%	Households in Area:	2,719
Center Latitude:	37.9647	Water Area:	0%	Housing Units in Area:	3,022
Center Longitude:	-120.23595	Population Density:	248/sq.mi.	Households on Public Assistance:	125
Total Persons:	6,794	Percent Minority:	17%	Persons Below Poverty Level:	2,570

Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	5,983 (88%)	Child 5 years and younger:	354 (5%)
African-American:	25 (0%)	Minors 17 years and younger:	1,496 (22%)
Hispanic-Origin:	662 (10%)	Adults 18 years and older:	5,298 (78%)
Asian/Pacific Islander:	65 (1%)	Seniors 65 years and older:	1,089 (16%)
American Indian:	302 (4%)		
Other/Multiracial:	418 (6%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown	Households (%)
Less than 9th Grade:	65 (1.46%)	Less than \$15,000:	247 (9.32%)
9th through 12th Grade:	340 (7.62%)	\$15,000 - \$25,000:	285 (10.76%)
High School Diploma:	1,418 (31.78%)	\$25,000 - \$50,000:	908 (34.28%)
Some College/2-yr:	2,110 (47.29%)	\$50,000 - \$75,000:	470 (17.74%)
B.S./B.A. or More:	529 (11.86%)	Greater than \$75,000:	739 (27.9%)

# Appendix C

---

Hazards and Nuisances

# Alquist-Priolo Earthquake Fault Zones

Table 4.  
Cities and Counties Affected by Alquist-Priolo  
Earthquake Fault Zones as of January 2010

This is an updated version of Table 4 from the 2007 edition of Special Publication 42 (Fault-Rupture Hazard Zones in California, by William A. Bryant and Earl W. Hart)\*. The list is current as of January 2010. However, additional cities may be affected by the zones as new cities are created, city boundaries are expanded, or new zones are established.

CITIES (105)**		
American Canyon	Highland	San Bernardino
Arcadia	Hollister	San Bruno
Arcata	Huntington Beach	San Diego
Bakersfield	Indio	San Fernando
Banning	Inglewood	San Jacinto
Barstow	La Habra	San Jose
Beaumont	La Habra Heights	San Juan Bautista
Benicia	Lake Elsinore	San Leandro
Berkeley	Livermore	San Luis Obispo
Bishop	Loma Linda	San Marino
Brea	Long Beach	San Pablo
Calimesa	Los Angeles	San Ramon
Camarillo	Malibu	San Ramon
Carson	Mammoth Lakes	Santa Clarita
Cathedral City	Milpitas	Santa Rosa
Chino Hills	Monrovia	Seal Beach
Coachella	Moorpark	Signal Hill
Colton	Moreno Valley	Signal Hill
Compton	Morgan Hill	Simi Valley
Concord	Murrieta	South Pasadena
Corona	Oakland	South San Francisco
Coronado	Pacifica	Temecula
Culver City	Palmdale	Trinidad
Daly City	Palm Springs	Twentynine Palms
Danville	Palo Alto	Union City
Desert Hot Springs	Pasadena	Upland
Dublin	Petaluma	Ventura (San Buenaventura)
El Cerrito	Pleasanton	Walnut Creek
Fairfield	Portola Valley	Whittier
Fontana	Rancho Cucamonga	Wildomar
Fortuna	Redlands	Willits
Fremont	Rialto	Windsor
Gardena	Richmond	Woodside
Glendale	Ridgecrest	Yorba Linda
Hayward	Rosemead	Yucaipa
Hemet		Yucca Valley
COUNTIES (36)		

Feedback

Alameda	Napa
Alpine	Orange
Butte	Riverside
Contra Costa	San Benito
Fresno	San Bernardino
Humboldt	San Diego
Imperial	San Luis Obispo
Inyo	San Mateo
Kern	Santa Barbara
Lake	Santa Clara
Lassen	Santa Cruz
Los Angeles	Shasta
Marin	Siskiyou
Mendocino	Solano
Merced	Sonoma
Modoc	Stanislaus
Mono	Ventura
Monterey	Yolo

\* To inquire about local government policies and regulations you will need to address the Planning Director of each county or city. Some jurisdictions have replotted the Earthquake Fault Zone boundaries on large-scale parcel maps.

\*\* Additional cities may be affected by the zones as new cities are created, city boundaries are expanded, or new zones are established.

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#### Data & Information

- > Public Records Act Requests
- > WellSTAR
- > Aliso Canyon Testing
- > Farmland Mapping and Monitoring
- > Earthquake Preparation

#### Maps

- > Earthquake Zone App (EQ Zapp)
- > CGS Regulatory Maps
- > Well Finder
- > Geologic Map of California
- > Fault Activity Map of California

#### Site Resources

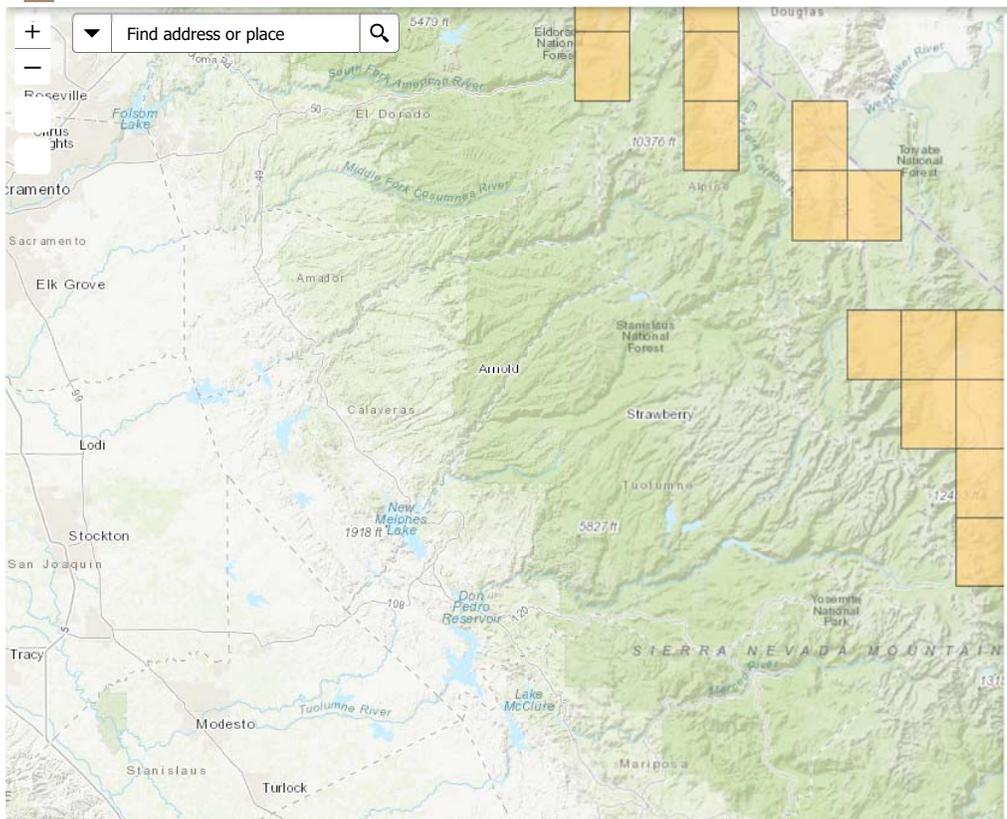
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CGS Information Warehouse: Regulatory Maps



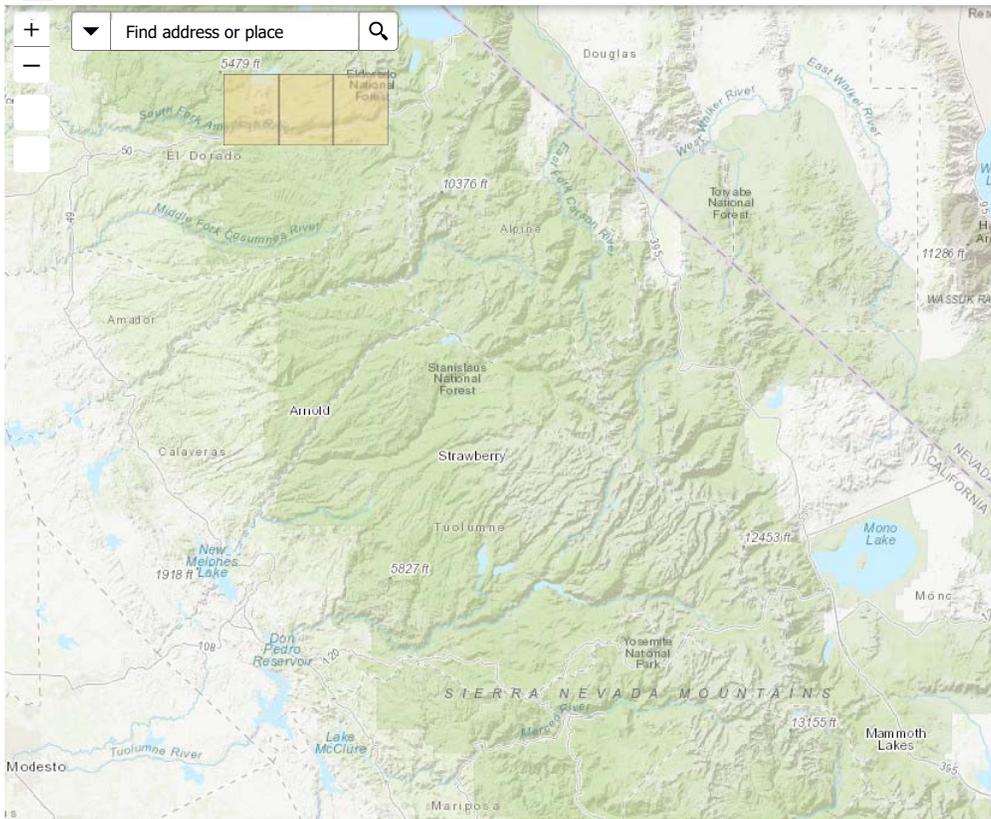
**Legend**

**Regulatory Maps**

-  Fault Zones, Landslide and Liquefaction Zones
-  Earthquake Fault Zones
-  Landslide and Liquefaction Zones

20mi -117.473 38.909 Degrees

CGS Information Warehouse: Landslides



**Legend**

Landslide Reports and Maps

- Areas with Landslide Reports or Maps

20mi -117.133 38.995 Degrees

# Appendix D

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## Traffic Impact Study

# Tuolumne Community Resiliency Center Tuolumne County, CA Transportation Impact Study



## Final Report

Prepared For:

Ascent Environmental, Inc.

March 2019

Prepared By:



**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**Tuolumne Community Resiliency Center  
Tuolumne County, CA**

**TRANSPORTATION IMPACT STUDY**

**FINAL REPORT**

**Prepared For:  
Ascent Environmental, Inc.**

**Prepared By**



**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**3301 C Street, Building 100-B  
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(916) 341-7760**

**March 2019**

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Appendix A – Project Site Plan
Appendix B – Raw Count Sheets
Appendix C – Required Minimum Intersection Sight Distance Triangles

## EXECUTIVE SUMMARY

This report has been prepared to present the results of a Transportation Impact Study (TIS) performed by Wood Rodgers, Inc. for a proposed Community Resiliency Center (Project) in the community of Tuolumne, California. This analysis has been performed to determine any impacts the proposed Project may have on surrounding transportation facilities and potential mitigation measures that could be implemented to address any significant impacts. This TIS report was prepared in accordance with Tuolumne County, California Environmental Quality Act (CEQA), and National Environmental Policy Act (NEPA) requirements and guidelines.

### PROJECT SITE DESCRIPTION

The Project envisions development of two currently vacant parcels located at the intersection of Cherry Valley Boulevard and Bay Street in Tuolumne, CA. An approximately 12,000 square foot Community Resiliency Center building and adjacent parking lot is planned to be located directly south of the Cherry Valley Boulevard / Bay Street intersection and west of the Tuolumne Youth Center (southern parcel). An additional Project parking lot would be constructed on the northeast quadrant of the Cherry Valley Boulevard / Bay Street intersection (northern parcel). The southern parcel would gain access to the surrounding roadway network via a proposed driveway to be located on Cherry Loop. The northern parcel would gain access to the surrounding roadway network via one proposed driveway on Bay Street and one proposed driveway on Cherry Valley Boulevard.

### PROJECT GENERATED TRIPS

New trips generated by the proposed Project were estimated using rates from the *Institute of Transportation Engineers Trip Generation Manual, 10<sup>th</sup> Edition*. The proposed Project is anticipated to generate a total of 346 daily trips, 22 new AM peak hour (15 inbound, 7 outbound), and 28 new PM peak hour (13 inbound, 15 outbound) trips under typical annual average traffic demand conditions.

### ROADWAY SEGMENT OPERATIONS, IMPACTS, AND MITIGATION MEASURES

This TIS report analyzed four (4) study roadway segments under “Existing”, “Existing plus Project”, “Near-term No Project”, “Near-term plus Project”, “Cumulative (long-term) No Project”, and “Cumulative (long-term) plus Project” weekday daily conditions. Study roadway segments were chosen based on projected travel patterns of Project site trips, knowledge of the area, and engineering judgement. Average Daily Traffic (ADT)-based Level of Service (LOS) standards and significant impact criteria used in this TIS were based on the Tuolumne County Transportation Council (TCTC) Roadway ADT LOS Lookup Table shown in **Table 1**.

All study roadway segments are projected to operate at acceptable LOS “D” or better under “Existing”, “Existing plus Project”, “Near-term No Project”, “Near-term plus Project”, “Cumulative (long-term) No Project”, and “Cumulative (long-term) plus Project” weekday daily conditions.

The Project would generate approximately 3,564 daily Vehicle Miles Traveled (VMT) in Tuolumne County.

### PROJECT DRIVEWAY SIGHT DISTANCES AND DISTANCES BETWEEN APPROACHES

Driveway sight distances for the Project were analyzed against sight distance requirements for commercial roads/driveways contained in the *Tuolumne County Community Resources Agency Roads Division Encroachment Permit Information Packet* (Tuolumne County, 2014). The distances between the proposed Project driveways and the nearest approaches were also analyzed against the minimum

recommended distances between a commercial approach and any other approach contained in the *County Encroachment Permit Information Packet*. All proposed Project driveways are projected to meet the County's sight distance and distance between approaches requirements.

## I. INTRODUCTION

This report has been prepared to present the results of a TIS performed by Wood Rodgers, Inc. for a proposed Community Resiliency Center located in the census-designated place of Tuolumne in Tuolumne County (County), California. This analysis has been performed to determine any impacts the proposed Project may have on surrounding transportation facilities and potential mitigation measures that could be implemented to address any significant impacts caused by the Project. This analysis focuses on typical weekday operating conditions at the Project site, and not special event scenarios such as during a natural disaster. This TIS includes sight distance analysis for potential Project site driveway locations.

### I.1 PROJECT DESCRIPTION

The Project site consists of two parcels located at the intersection of Cherry Valley Boulevard and Bay Street in Tuolumne, CA. An approximately 12,000 square foot community resiliency center building and adjacent parking lot is planned to be located on the south side of the Cherry Valley Boulevard / Bay Street T-intersection, west of the Tuolumne Youth Center. An additional Project parking lot would be constructed on the northeast quadrant of the Cherry Valley Boulevard / Bay Street intersection. Total paved parking area between the two parcels would be approximately 65,000 square feet. The Project site would provide approximately 200 parking stalls for its users. The Project site location is shown on the map in **Figure 1**. The Project Site Plan (Lionakis, dated September 25, 2019) may be found in **Appendix A**.

The Community Resiliency Center will be designed with flexible spaces and areas that can be utilized by multiple people/groups at the same time. The building is planned to contain the following spaces: a lobby area, a large gathering room (100-200 person capacity), a few small classroom type rooms, a commercial kitchen, and restrooms. The County will be contracting with Non-Profit Groups to oversee the activities of the facility and schedule meetings. One (1) Facilities Management staff may also be required. Non-Emergency facility uses and activities include rentals by various community groups and businesses for meetings, trainings, parties, and fundraisers. Governmental Entities will also use these facilities to hold town hall meetings and make presentations. Emergency uses and activities include utilizing the facility as an emergency shelter, as temporary housing, for possible feeding of first responders, and for emergency responders to conduct community briefings during emergency events.

### I.2 STUDY AREA

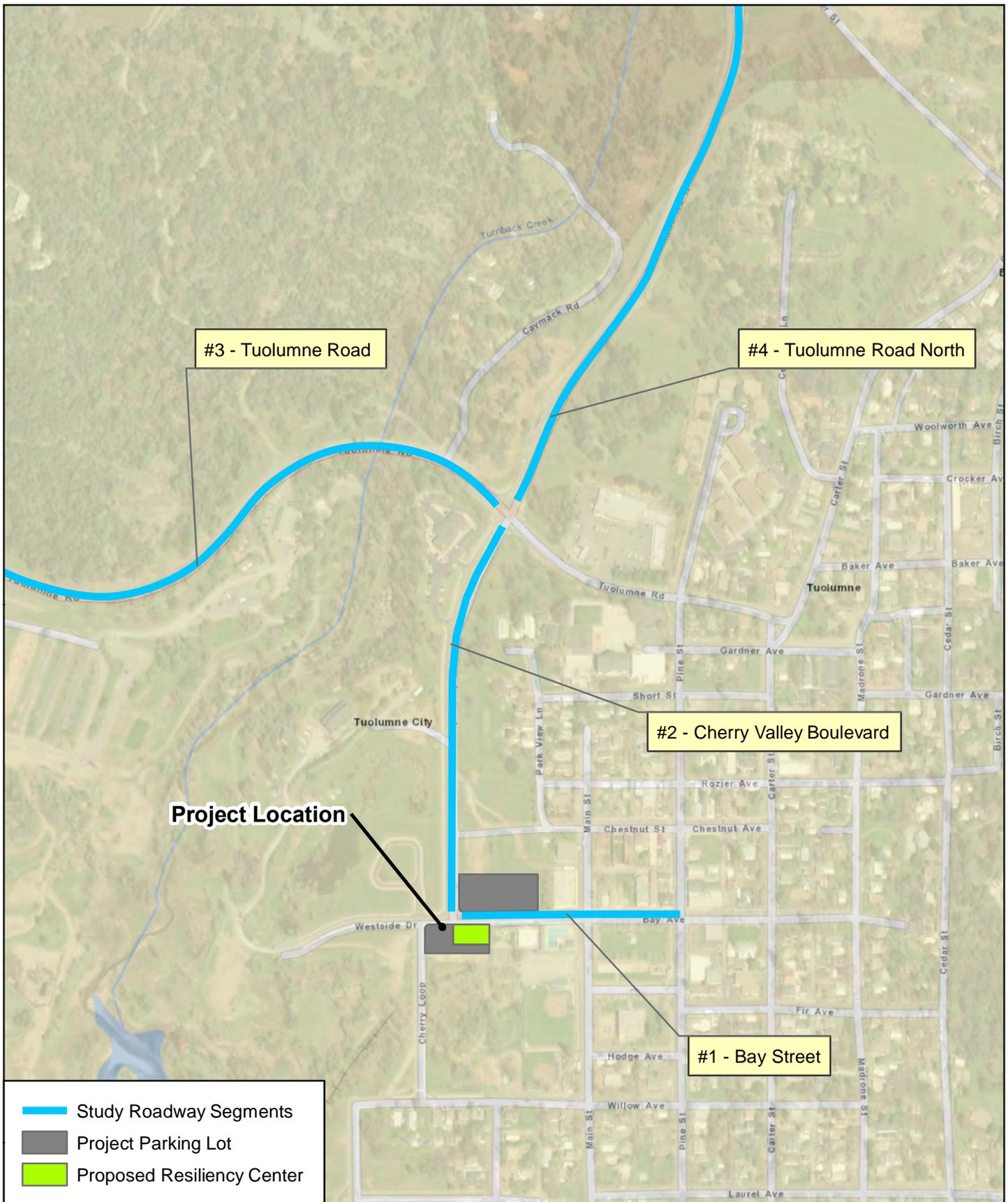
The Project study area extends along Bay Street and Cherry Valley Boulevard in proximity of the Project site, as well as Tuolumne Road from Wards Ferry Road (western limit) to SR 108 (eastern limit). Study facilities include the roadway segments discussed below.

#### I.2.1 Roadway Segments

Roadway segments were selected for analysis based on projected travel patterns of Project site trips, knowledge of the area, and engineering judgement. The list of study roadway segments was reviewed by County staff prior to preparation of the TIS. The following four (4) existing study roadway segments were analyzed in this TIS:

1. Bay Street between Cherry Valley Boulevard and Pine Street
2. Cherry Valley Boulevard between Bay Street and Tuolumne Road
3. Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard
4. Tuolumne Road between Cherry Valley Boulevard and SR 108

The locations of the above roadway segments are shown on **Figure 1**.



**Project Location and Study Facilities**  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019

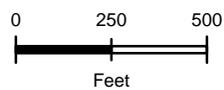


Figure 1

### I.3 ANALYSIS SCENARIOS

Four roadway segments were evaluated under weekday daily conditions for the following scenarios:

- **Existing Conditions:** Existing traffic volumes from counts.
- **Existing plus Project Conditions:** Existing traffic volumes plus traffic projected to be generated by the proposed Project.
- **Near-term No Project Conditions:** Analysis of near-term future year 2020 traffic conditions developed by applying a yearly growth rate, calculated from the Tuolumne County Regional Travel Demand Model (RTDM), to existing traffic volume counts.
- **Near-term plus Project Conditions:** “Near-term No Project” volumes plus traffic projected to be generated by the proposed Project.
- **Cumulative (long-term) No Project Conditions:** Analysis of long-term future year 2040 traffic conditions developed by applying a yearly growth rate, calculated from the Tuolumne County RTDM, to existing traffic volume counts.
- **Cumulative (long-term) plus Project Conditions:** “Cumulative (long-term) No Project” volumes plus traffic projected to be generated by the proposed Project.

### I.4 ANALYSIS METHODS

All study roadways were classified as urban or rural, and all roadways were further classified as rolling or mountainous. Roadway segment LOS was calculated by comparing study roadway ADT volumes, obtained from recent traffic counts, to the corresponding TCTC Roadway ADT LOS thresholds for the roadway type contained in the *Tuolumne County General Plan and Regional Transportation Plan Update EIR Traffic Study* (Wood Rodgers, August 2015). The TCTC Roadway ADT LOS Lookup Table is shown in **Table 1**.

Intersection analysis was not included in this TIS. According to the *Guide of the Preparation of County of Tuolumne Traffic Impact Studies*, a full TIS is needed when a project generates over 50 peak hour trips assigned to a County roadway or a highway. Based on the trip generation performed for this Project (see Section 3.2.1 of this TIS for trip generation details), the Project would generate up to 28 peak hour trips, and therefore would not trigger the County requirement for a full TIS with intersection analysis.

Typical daily weekday analysis was performed for this TIS. It was determined that existing traffic volumes on study roadways remained generally consistent (within five percent of each other) on weekdays and weekends, and therefore weekday traffic counts were a reasonable approximation of weekend traffic counts for study roadway segments (see Section 2.5 of this TIS for additional discussion). It was also determined that *Institute of Transportation Engineers Trip Generation Manual, 10<sup>th</sup> Edition* based weekday trip generation rates were a reasonably conservative estimate of Project generated trips on both weekdays and weekends, consistent with County estimates of site usage (see Section 3.2.1 of this TIS for additional discussion). Therefore, the typical daily weekday analysis included in this TIS could also be considered a reasonable estimate of daily weekend operating conditions with and without the Project.

**Table 1. TCTC Generalized Roadway ADT LOS Lookup Table**

FHWA FC#	Roadway Type	Type #	Area Type	Maximum Two-way Average Daily Traffic (ADT) Volume-carrying Capacity for each LOS Designation				
				LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"
4	Rural Arterial (4-lane) Divided	1	ROLLING	6,240	12,480	18,720	26,520	31,200
4	Rural Arterial (4-lane) Undivided	2		4,820	9,640	14,460	20,485	24,100
4	Rural Minor Arterial (4-lane)	3		6,080	12,160	18,240	25,840	30,400
4	Rural Minor Arterial (with left-turn Lane)	4		4,600	9,200	13,800	19,550	23,000
4	Rural Minor Arterial (2-lane)	5		3,120	6,240	9,360	13,260	15,600
5	Major Collector (34 ft. - 36 ft.)	6		3,420	6,840	10,260	14,535	17,100
5	Major/Minor Collector (23 ft. - 32 ft.)	7		2,900	5,800	8,700	12,325	14,500
5	Major/Minor Collector (20 ft. - 23 ft.)	8		2,590	5,180	7,770	11,008	12,950
5	Major/Minor Collector (18 ft. - 20 ft.)	9		2,300	4,600	6,900	9,775	11,500
5	Major/Minor Collector (Less than 18 ft.)	10		1,920	3,840	5,760	8,160	9,600
6	Local Road	11		1,920	3,840	5,760	8,160	9,600
4	Rural Arterial (4-lane) Divided	101	MOUNTAINOUS	5,810	11,610	17,410	24,670	29,020
4	Rural Arterial (4-lane) Undivided	102		4,490	8,970	13,450	19,060	22,420
4	Rural Minor Arterial (4-lane)	103		5,660	11,310	16,970	24,040	28,280
4	Rural Minor Arterial (with left-turn Lane)	104		4,280	8,560	12,840	18,190	21,390
4	Rural Minor Arterial (2-lane)	105		2,910	5,810	8,710	12,340	14,510
5	Major Collector (34 ft. - 36 ft.)	106		3,190	6,370	9,550	13,520	15,910
5	Major/Minor Collector (23 ft. - 32 ft.)	107		2,700	5,400	8,100	11,470	13,490
5	Major/Minor Collector (20 ft. - 23 ft.)	108		2,410	4,820	7,230	10,240	12,050
5	Major/Minor Collector (18 ft. - 20 ft.)	109		2,140	4,280	6,420	9,100	10,700
5	Major/Minor Collector (Less than 18 ft.)	110		1,790	3,580	5,360	7,590	8,930
6	Local Road	111		1,790	3,580	5,360	7,590	8,930
2	4-Lane Freeway	201	URBAN	28,000	43,200	61,600	74,400	80,000
2	3-Lane Freeway	202		10,100	20,200	30,300	42,925	50,500
2	2-Lane Freeway + Auxiliary Lanes	203		8,392	16,784	25,176	35,666	41,960
2	2-Lane Freeway	204		6,680	13,360	20,040	28,390	33,400
2	4-Lane Expressway	205		24,000	28,000	32,000	36,000	40,000
2	2-Lane Expressway	206		12,000	14,000	16,000	18,000	20,000
3	6-Lane Divided Arterial (with left-turn lane)	207		32,000	38,000	43,000	49,000	54,000
3	4-Lane Divided Arterial (with left-turn lane)	208		22,000	25,000	29,000	32,500	36,000
3	4-Lane Undivided Arterial (no left-turn lane)	209		18,000	21,000	24,000	27,000	30,000
4	2-Lane Principal/Minor Arterial (with left-turn lane)	210		2,900	7,700	14,300	20,100	31,300
4	2-Lane Principal/Minor Arterial (no left-turn lane)	211		2,900	7,200	11,900	16,100	24,200
5	2-Lane Major/Minor Collector (with left-turn lane)	212		3,400	6,900	11,600	15,800	29,400
5	2-Lane Major/Minor Collector (no left-turn lane)	213		2,700	5,600	9,200	12,800	23,500
6	2-Lane Local Street	214		2,300	4,900	8,400	11,400	21,200

**Notes:**

1. Values shown corresponding to LOS A through E are roadway ADT traffic volumes
2. Collector width is measured from the edge of pavement to the edge of pavement
3. Roadways with continuous grade steeper than 6% or above 4,000 ft. elevation should use mountainous terrain LOS thresholds
4. Site Specific LOS maybe necessary
5. Peak Hour LOS threshold is assumed to be 10% of the daily traffic volume unless site specific analysis shows a different peak hour to daily traffic ratio
6. Examples LOS A (0.20 of capacity), LOS B (0.21 to 0.40 of capacity), LOS C (0.41 to 0.60 of capacity), LOS D (0.61 to 0.85 of capacity), LOS E (0.86 to 0.92 of capacity)

All volumes thresholds are approximate and assumes average roadway characteristics. Actual threshold volume for each Level of Service listed above may vary depending on a variety of factors including (but not limited to) roadway curvature and grade, intersection or interchange spacing, driveway spacing, percentage of trucks, RVs and other heavy vehicles, travel lane widths, speed limits, signal timing characteristics, on-street parking, volume of cross traffic and pedestrians, etc.

## **I.5 LEVEL OF SERVICE STANDARDS AND SIGNIFICANT IMPACT CRITERIA**

Consistent with the *2018 General Plan Update Appendix B: Tuolumne County General Plan and Regional Transportation Plan Update EIR Traffic Study* (Wood Rodgers, August 2015), the minimum LOS standard for Minor Collectors, Major Collectors, Rural Arterials and Urban Local Streets (County facilities) was assumed to be LOS “D”, unless an exception is made by the County. The minimum LOS standard for rural local roads and residential roads was assumed to be LOS “C”. The minimum peak hour LOS standard for all County intersections was assumed to be LOS “D”.

## **I.6 REPORT ORGANIZATION**

The remainder of this report is divided into the following chapters:

- Chapter 2: Existing Conditions – Describes existing conditions and operations of the study area intersections, transit system, pedestrian facilities, and bicycle facilities.
- Chapter 3: Existing Plus Project Conditions – Describes the methods used to estimate and distribute Project generated traffic and the resulting study area operations.
- Chapter 4: Near-term No Project – Describes projected conditions and operations of study area facilities under Near-term No Project conditions.
- Chapter 5: Near-term plus Project – Describes projected conditions and operations of study area facilities under Near-term plus Project conditions.
- Chapter 6: Cumulative (long-term) No Project – Describes projected conditions and operations of study area facilities under Cumulative (long-term) No Project conditions.
- Chapter 7: Cumulative (long-term) plus Project – Describes projected conditions and operations of study area facilities under Cumulative (long-term) plus Project conditions.
- Chapter 8: Project Impacts and Mitigation Measures – Describes the projected impacts the Project will have on study area facilities (if any) and presents potential mitigations.
- Chapter 9: Site Access and Circulation – Describes site access, circulation, and Project Driveway sight distances for the Project Site.

## 2. EXISTING CONDITIONS

This chapter describes the existing roadway network, transit services, pedestrian facilities, and bicycle facilities within the study area. It also presents existing ADT at study roadway segments and existing study roadway segment LOS.

### 2.1 EXISTING ROADWAY NETWORK

This section provides descriptions of the study area roadways.

**Bay Street** is a two-lane local street that runs east-west between Cherry Valley Boulevard and Madrone Street. Bay Street forms a one-way stop-controlled T-intersection with Cherry Valley Boulevard. As Bay Street is a local street, the speed limit is assumed to be 25 miles per hour (mph).

**Cherry Valley Boulevard** is a two-lane minor collector that runs north-south between Bay Street and Tuolumne Road, where it becomes Tuolumne Road North. As Cherry Valley Boulevard is a minor collector, the speed limit is assumed to be 35 mph. Cherry Valley Boulevard forms a signalized intersection with Tuolumne Road.

**Cherry Loop** is a two-lane local street that runs north-south between Bay Street and Willow Avenue. As Cherry Loop is a local street, the speed limit is assumed to be 25 mph.

**Tuolumne Road** is a two-lane major collector that runs east-west between Mono Way and Carter Street. The posted speed limit on Tuolumne Road near the Cherry Valley Boulevard intersection is 25 mph. The speed limit increases to 45 mph west of Westside Road. Tuolumne Road forms a signalized intersection with Cherry Valley Boulevard.

**Tuolumne Road North** is a two-lane major collector roadway that runs north-south between SR 108 and Tuolumne Road, where it becomes Cherry Valley Boulevard. The posted speed limit on Tuolumne Road North is 35 mph.

### 2.2 PEDESTRIAN FACILITIES

Pedestrian sidewalks exist along the north and west frontage of the southern Project parcel. A pedestrian sidewalk also exists along the west side of the additional Project parking lot. There is no pedestrian sidewalk along the south-east Bay Street frontage of the additional Project parking lot. There are no pedestrian crossings at the Cherry Valley Boulevard / Bay Street intersection or the Cherry Loop / Bay Street intersection. Marked pedestrian crosswalks exist on all legs of the all-way stop-controlled Main Street / Bay street intersection and the signalized Cherry Valley Boulevard / Tuolumne Road intersection.

### 2.3 BICYCLE FACILITIES

The *Tuolumne County 2016 Regional Transportation Plan* (ICTC, January 2017) classifies bikeways as follows:

- **Class I Bike Path** – Provides a completely separate right of way designated for exclusive use of bicycles and pedestrians with cross-flows by motorists minimized.
- **Class II Bike Lanes** – Provides a restricted right-of-way through signs and pavement striping designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrian prohibited, but with vehicle cross-flows by pedestrian and motorists permitted. In California, the Manual on Uniform Traffic Control Devices (MUTCD) sign #R3-17 normally designates class II facilities.

Study area bicycle facilities have been identified using information from the *Tuolumne County 2016 Regional Transportation Plan*. No bike lanes were detected within or near the Project study area. Shoulders of 4 feet width were detected along Cherry Valley Boulevard. Shoulders of 4 feet width were detected at the south side of Bay Street, along Project site frontage, and the north side of Bay Street approximately 150 feet east of Cherry Valley Boulevard.

## 2.4 EXISTING TRANSIT SERVICE

Tuolumne County Transit provides bus service within the Project study area. Tuolumne County Transit provides general on demand, dial-a-ride service seven days a week in the Project study area. Bus Route 5 – Tuolumne/Sonora passes through Tuolumne Road, Carter Street, Bay Street, makes a loop around West Side Memorial Park, passes through Bay Street by Project site frontage, and exits the community of Tuolumne through Cherry Valley Boulevard to Tuolumne Road North. The closest Flag Stop area to the Project site is within 800 feet, located on Pine Street east of West Side Memorial Park. Another Flag Stop area is located approximately 1,300 feet north of the Project site, on Cherry Valley Boulevard at the Me Wuk Health Care Clinic. Flag Stops are indicated locations along an existing route that the bus can safely stop at if a potential passenger flags the bus down. Flag Stops have no scheduled stops. Flagging an approaching bus involves indicating early and clearly to the driver that one desires the bus to stop. Flag Stops are at the discretion of the bus driver, taking into consideration the safety of passengers on board. One scheduled bus stop is located within 1,700 feet of the Project site at Tuolumne Post Office on Carter Street. This location has six scheduled bus stops throughout the day.

## 2.5 EXISTING ROADWAY SEGMENT VOLUMES

Project study roadway segment traffic operations were evaluated for typical existing daily weekday conditions. Wood Rodgers conducted new 24 hour vehicular traffic counts at the following roadway segments on Tuesday October 16, 2018:

1. Bay Street between Cherry Valley Boulevard and Pine Street
2. Cherry Valley Boulevard between Bay Avenue and Tuolumne Road
3. Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard
4. Tuolumne Road North between Cherry Valley Boulevard and SR 108

24 hour weekend counts were also conducted on Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard on Saturday October 20, 2018. Weekend ADT on this segment was found to be within five percent of the existing weekday count. Therefore, traffic operations on the weekend were assumed to be similar to those during the week. **Figure 1** illustrates existing study roadway segments and **Figure 2** illustrates “Existing” conditions study roadway segment ADTs. Roadway segment raw count sheets are included in **Appendix B**.

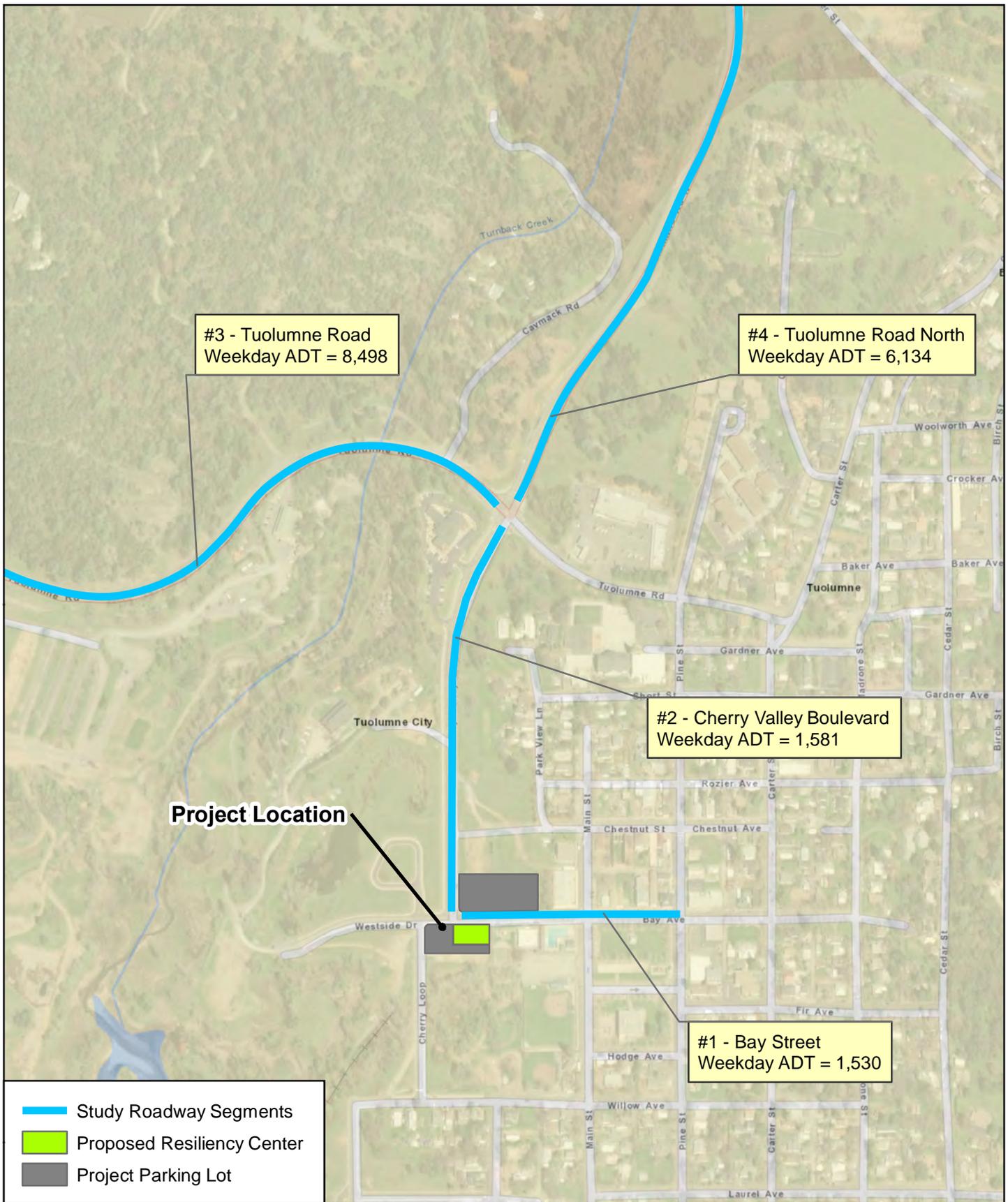
## 2.6 EXISTING ROADWAY SEGMENT OPERATIONS

**Table 2** presents existing study roadway segment traffic operations under “Existing” roadway ADT volumes.

As shown in **Table 2**, all study roadway segments are currently operating at acceptable level of service conditions (LOS “D” or better).

**Table 2. “Existing” Conditions Roadway Segment Traffic Operations**

#	Roadway Segment	Type # <sup>1</sup>	Roadway Capacity	Min. LOS Std.	ADT	LOS
1	Bay Street between Cherry Valley Boulevard and Pine Street	214	21,200	D	1,530	A
2	Cherry Valley Boulevard between Bay Street and Tuolumne Road	212	29,400	D	1,581	A
3	Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard	6	17,100	D	8,498	C
4	Tuolumne Road between Cherry Valley Boulevard and SR 108	6	17,100	D	6,134	B
Note: <sup>1</sup> Type # from <b>Table 1</b> . TCTC Generalized Roadway ADT LOS Lookup Table						



"Existing" Traffic Volumes  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019

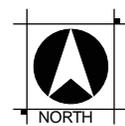


Figure 2

### 3. EXISTING PLUS PROJECT CONDITIONS

This chapter provides a description of the proposed Project, a discussion of the trip generation and distribution/assignment methods used to come up with “Project Only” volumes at study roadway segments, and an analysis of projected traffic operations due to the proposed Project.

#### 3.1 PROJECT SITE DESCRIPTION

The proposed Project plans to develop a community resiliency center on two parcels totaling 1.7 acres. The building will be approximately 12,000 square feet. The area to be paved for parking will be approximately 65,000 square feet, with approximately 200 parking stalls.

The County provided the following estimates of anticipated usage of the Tuolumne Community Resiliency Center:

- Weekday Daytime Use (Monday – Thursday) 20 – 30 people per day
- Weekday Evening Use (Monday – Thursday) 20 – 60 people per day
- Weekend Use (Friday – Sunday) 40 – 200 people per day

The usage estimates above were based on the current schedule for an existing Community Center in Tuolumne.

#### 3.2 PROJECT GENERATED TRIPS

##### 3.2.1 Trip Generation

The following trip generation rates from the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10<sup>th</sup> Edition* were used to estimate Project generated trips:

**Recreational Community Center** – For the proposed community resiliency center, the Recreational Community Center (Code 495) trip generation rate is used. ITE Trip Generation describes the Recreational Community Center as: “...stand-alone public facility similar to and including YMCAs. These facilities often include classes and clubs for adults and children: a day care or nursery school; meeting rooms; swimming pools and whirlpools; saunas; tennis, racquetball, handball, basketball and volleyball courts; outdoor athletic fields/ courts; exercise classes; weightlifting and gymnastics equipment; locker rooms; and a restaurant or snack bar. Public access is typically allowed but a fee may be charged.”

ITE trip generation rates were used to estimate trips generated by the Project as they are generally accepted as an industry standard method of estimating traffic generation and they produced trips that were generally consistent with, or slightly more conservative than, the County’s estimate of Project usage included in Section 3.1. **Table 3** summarizes the trip generation rates used for the proposed Project and **Table 4** summarizes the trip generation volumes and reductions for the proposed Project.

According to the ITE trip generation rates, the Recreation Community Center land use type generates more trips on weekdays than on weekends. In order to remain conservative, it was assumed that the weekday trip generation rates could generally be used as a reasonable estimate of Project generated traffic on both weekdays and weekends.

**Table 3. Project Trip Generation Rates**

Land Use Category	Source	ITE Code	Rate Unit	Weekday Daily Trip Rate/Unit	Weekday AM Peak Hour Rate/Unit			Weekday PM Peak Hour Rate/Unit		
					Total	In%	Out%	Total	In%	Out%
Recreational Community Center	ITE	495	KSF <sup>1</sup>	28.82	1.76	66%	34%	2.31	47%	53%

Note:  
<sup>1</sup> KSF – 1000 Square Foot Floor Area

**Table 4. Project Trip Generation Volumes**

Land Use	Units	Quantity	Daily Trips	Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
				Total	In	Out	Total	In	Out
Recreational Community Center	KSF <sup>1</sup>	12	346	22	15	7	28	13	15

Note:  
<sup>1</sup> KSF – 1000 Square Foot Floor Area

As illustrated in **Table 4**, the proposed Project is anticipated to generate a total of 346 daily trips, 22 AM peak hour (15 inbound, 7 outbound) trips, and 28 PM peak hour (13 inbound, 15 outbound) trips under typical “annual average” traffic demand conditions. ITE Trip Generation average rates were used in place of fitted curve equations to better capture the realistic trip generation of the small square footage being developed.

The 346 daily Project trips estimated using ITE trip generation rates, and shown in **Table 4** above, are generally consistent with the County’s estimate of Project usage on weekends, but slightly higher than the County’s estimate of Project usage on weekdays. However, as Project usage is only an estimate and could end up being higher than anticipated by the County, the 346 daily trips were considered a reasonably conservative estimate of weekday Project trip generation as well.

### 3.2.2 Project Trip Distribution and Assignment

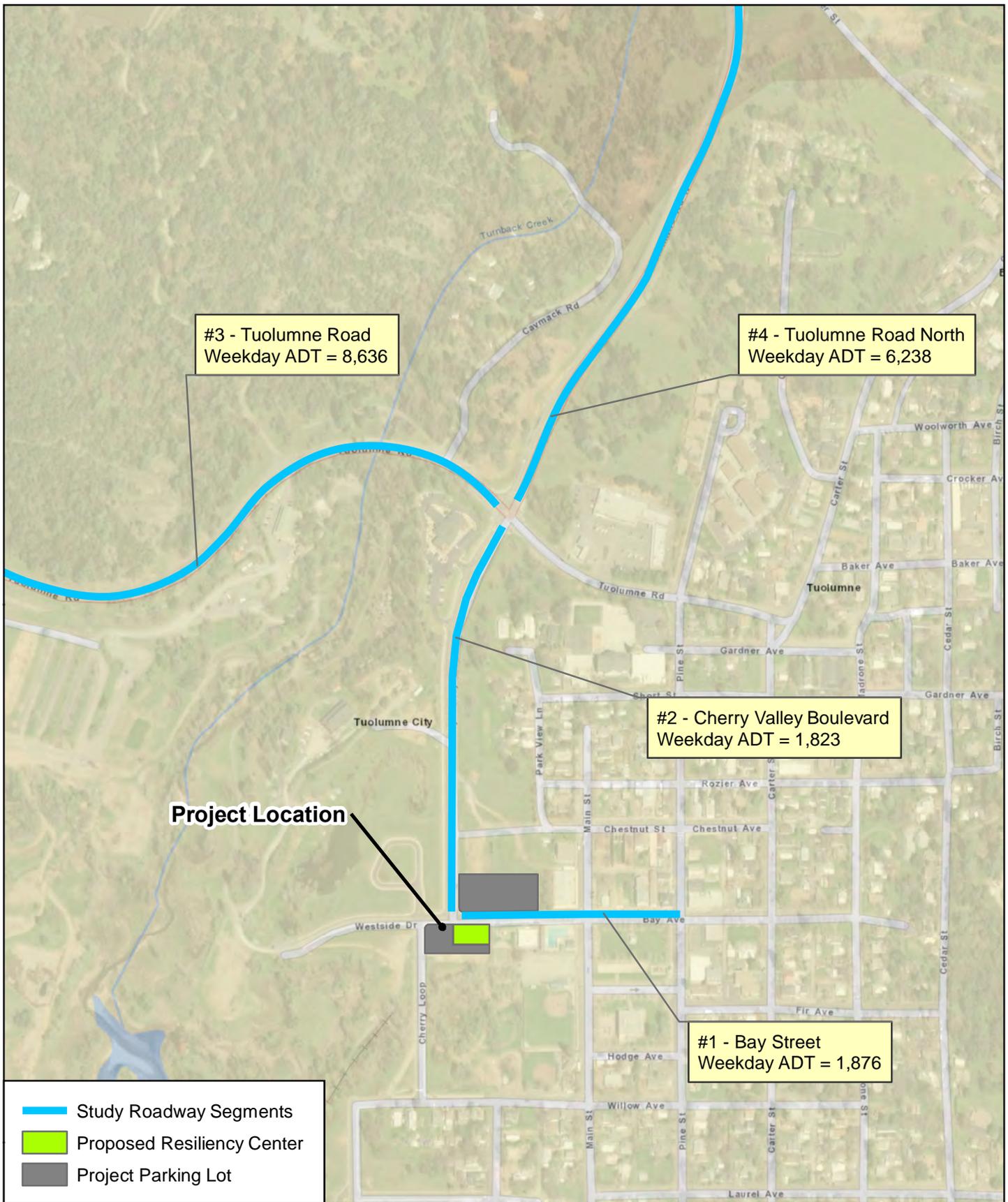
The Project trip distribution was determined based on existing traffic volumes and travel patterns, knowledge of the area, and engineering judgement. Project trips were assigned to the study area network based on the Project trip distribution.

**Figure 3** illustrates the estimated weekday daily Project directional trip distribution and assignment patterns projected to be generally applicable for the Project under existing conditions on an annualized average usage basis.

“Project Only” traffic volumes were added on top of “Existing” conditions traffic volumes at study roadway segments to create “Existing plus Project” conditions traffic volumes. **Figure 4** illustrates the estimated weekday daily “Existing plus Project” conditions traffic volumes at study roadway segments.



"Project Only" Trip Distribution and Assignment  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019



"Existing plus Project" Traffic Volumes  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019



Figure 4

### 3.3 “EXISTING PLUS PROJECT” ROADWAY SEGMENT OPERATIONS

“Existing plus Project” roadway operations were quantified under “Existing plus Project” traffic volumes (shown in **Figure 4**). **Table 5** illustrates the resulting “Existing plus Project” roadway segment LOS operations. **Table 5** also contains “Existing” conditions roadway segment ADT and LOS for comparison purposes.

**Table 5. “Existing plus Project” Conditions Roadway Segments Traffic Operations**

#	Roadway Segment	Type # <sup>1</sup>	Roadway Capacity	Min. LOS Std.	Existing Conditions		Existing Plus Project Conditions	
					ADT	LOS	ADT	LOS
1	Bay Street between Cherry Valley Boulevard and Pine Street	214	21,200	D	1,530	A	1,876	A
2	Cherry Valley Boulevard between Bay Street and Tuolumne Road	212	29,400	D	1,581	A	1,823	A
3	Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard	6	17,100	D	8,498	C	8,636	C
4	Tuolumne Road between Cherry Valley Boulevard and SR 108	6	17,100	D	6,134	B	6,238	B
Note: <sup>1</sup> Type # from <b>Table 1</b> . TCTC Generalized Roadway ADT LOS Lookup Table								

As shown in **Table 5**, all study roadway segments are projected to operate at acceptable Level of Service (LOS “D” or better) under “Existing plus Project” weekday daily conditions.

## 4. NEAR-TERM NO PROJECT

This chapter provides a description of the “Near-term No Project” roadway segment operations and roadway segment ADT volumes. “Near-term No Project” roadway volumes were obtained by applying a straight-line yearly growth rate to the vehicular traffic counts. The yearly growth rate was determined by differencing the Tuolumne County RTDM vehicular traffic volume projections for year 2015 (base-year) and year 2040 (build-out year), and dividing by 25 years. Year 2020 was chosen to represent near-term conditions in this TIS.

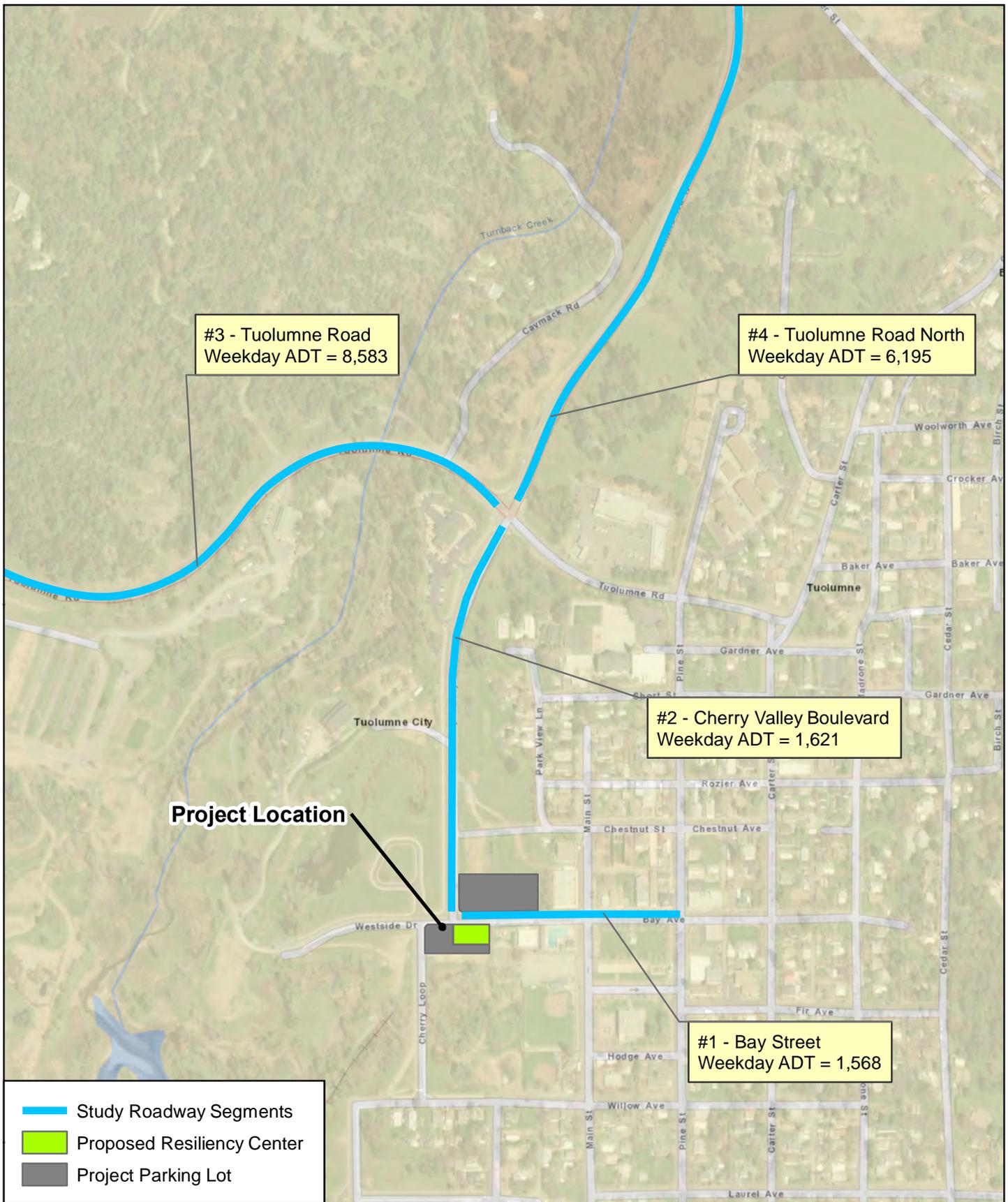
### 4.1 ROADWAY SEGMENT OPERATIONS

“Near-term No Project” roadway segment operations were quantified under “Near-term No Project” traffic volumes (shown in **Figure 5**). **Table 6** illustrates the resulting “Near-term No Project” conditions roadway segment LOS operations.

**Table 6. “Near-term No Project” Conditions Roadway Segments Traffic Operation**

#	Roadway Segment	Type # <sup>1</sup>	Roadway Capacity	Min. LOS Std.	ADT	LOS
1	Bay Street between Cherry Valley Boulevard and Pine Street	214	21,200	D	1,568	A
2	Cherry Valley Boulevard between Bay Street and Tuolumne Road	212	29,400	D	1,621	A
3	Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard	6	17,100	D	8,583	C
4	Tuolumne Road between Cherry Valley Boulevard and SR 108	6	17,100	D	6,195	B
Note: <sup>1</sup> Type # from <b>Table 1</b> . TCTC Generalized Roadway ADT LOS Lookup Table						

As shown in **Table 6**, all study roadway segments are projected to operate at acceptable Level of Service (LOS “D” or better) under “Near-term No Project” weekday daily conditions.



"Near-term No Project" Traffic Volumes  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019

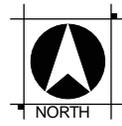


Figure 5

## 5. NEAR-TERM PLUS PROJECT

“Project Only” daily traffic volumes were added on top of “Near-term No Project” conditions traffic volumes to generate “Near-term plus Project” conditions traffic volumes. This chapter provides a description of the “Near-term plus Project” roadway segment operations and roadway segment ADT volumes.

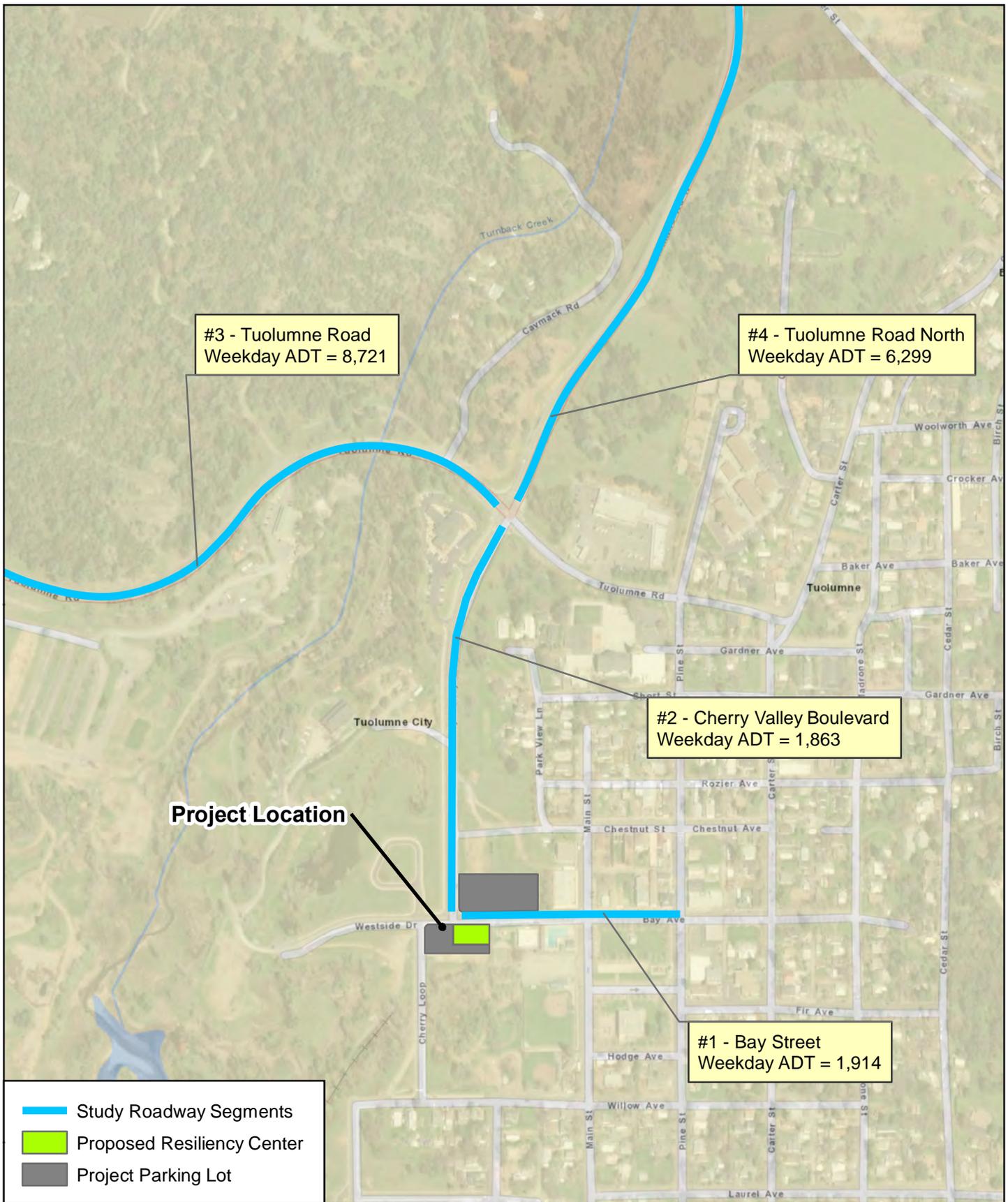
### 5.1 ROADWAY SEGMENT OPERATIONS

“Near-term plus Project” roadway segment operations were quantified under “Near-term plus Project” traffic volumes (shown in **Figure 6**). **Table 7** illustrates the resulting “Near-term plus Project” conditions roadway segments LOS operations. **Table 7** also contains “Near-term No Project” conditions roadway segment ADT and LOS for comparison purposes.

**Table 7. “Near-term plus Project” Conditions Roadway Segment Traffic Operations**

#	Roadway Segment	Type # <sup>1</sup>	Roadway Capacity	Min. LOS Std.	Near-term No Project Conditions		Near-term plus Project Conditions	
					ADT	LOS	ADT	LOS
1	Bay Street between Cherry Valley Boulevard and Pine Street	214	21,200	D	1,568	A	1,914	A
2	Cherry Valley Boulevard between Bay Street and Tuolumne Road	212	29,400	D	1,621	A	1,863	A
3	Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard	6	17,100	D	8,583	C	8,721	C
4	Tuolumne Road between Cherry Valley Boulevard and SR 108	6	17,100	D	6,195	B	6,299	B
Note: <sup>1</sup> Type # from <b>Table 1</b> . TCTC Generalized Roadway ADT LOS Lookup Table								

As shown in **Table 7**, all study roadway segments are projected to operate at acceptable Level of Service (LOS “D” or better) under “Near-term plus Project” weekday daily conditions.



"Near-term plus Project" Traffic Volumes  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019

## 6. CUMULATIVE (LONG-TERM) NO PROJECT

This chapter provides a description of “Cumulative (long-term) No Project” roadway segment operations and roadway segment ADT volumes. “Cumulative (long-term) No Project” roadway volumes were obtained by applying a straight-line yearly growth rate to the vehicular traffic counts. The yearly growth rate was determined by differencing the Tuolumne County RTDM vehicular traffic volume projections for year 2015 (base-year) and year 2040 (build-out year), and dividing by 25 years. Year 2040 was chosen to represent long-term conditions in this TIS.

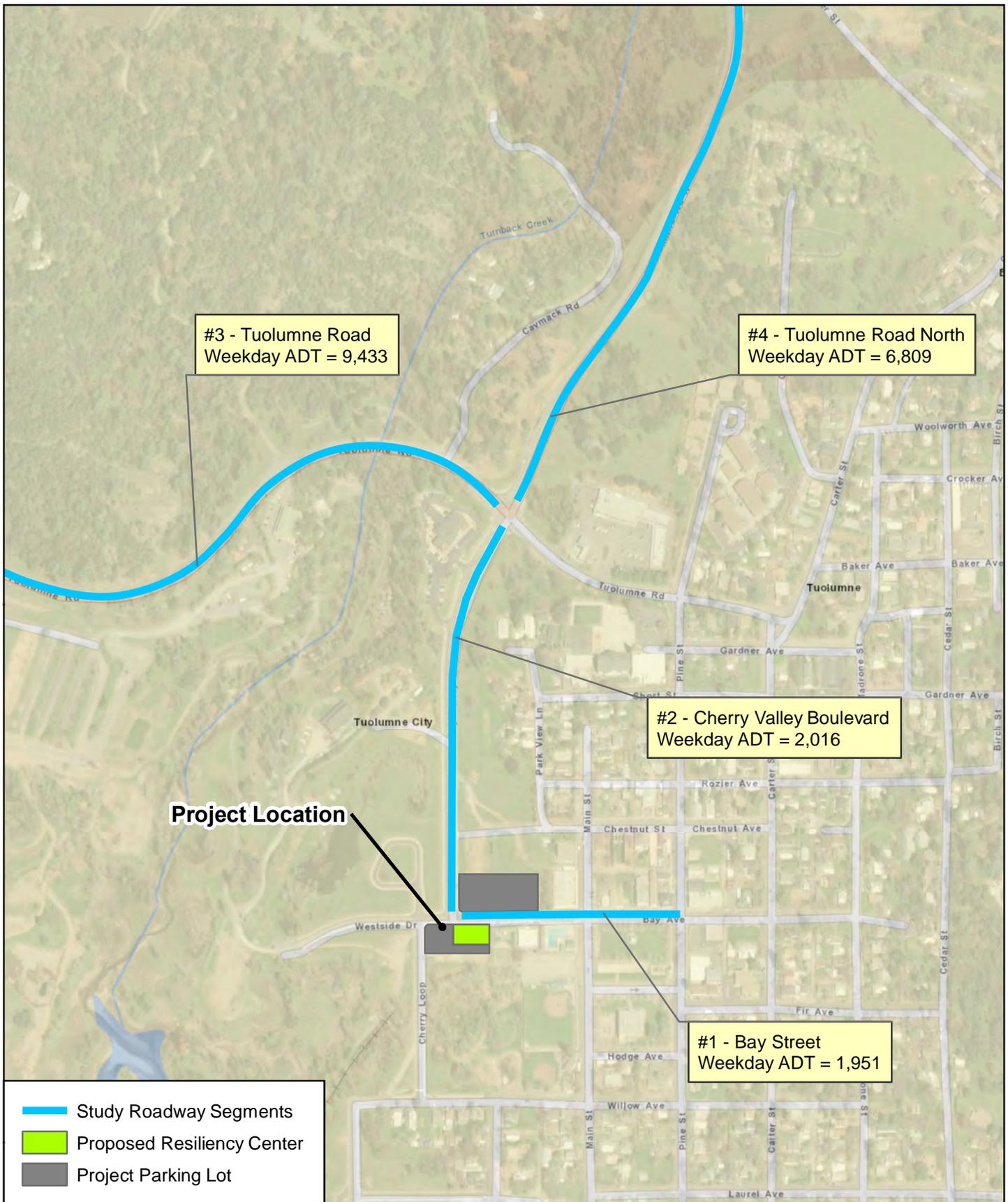
### 6.1 ROADWAY SEGMENTS OPERATIONS

“Cumulative (long-term) No Project” roadway segment operations were quantified under “Cumulative (long-term) No Project” traffic volumes (shown in **Figure 7**). **Table 8** illustrates the resulting “Cumulative (long-term) No Project” conditions roadway segment LOS operations.

**Table 8. “Cumulative (long-term) No Project” Conditions Roadway Segment Traffic Operations**

#	Roadway Segment	Type # <sup>1</sup>	Roadway Capacity	Min. LOS Std.	ADT	LOS
1	Bay Street between Cherry Valley Boulevard and Pine Street	214	21,200	D	1,951	A
2	Cherry Valley Boulevard between Bay Street and Tuolumne Road	212	29,400	D	2,016	A
3	Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard	6	17,100	D	9,433	C
4	Tuolumne Road between Cherry Valley Boulevard and SR 108	6	17,100	D	6,809	B
Note: <sup>1</sup> Type # from <b>Table 1</b> . TCTC Generalized Roadway ADT LOS Lookup Table						

As shown in **Table 8**, all study roadway segments are projected to operate at acceptable Level of Service (LOS “D” or better) under “Cumulative (long-term) No Project” weekday daily conditions.



"Cumulative (long-term) No Project" Traffic Volumes  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019

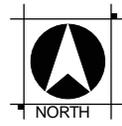


Figure 7

## 7. CUMULATIVE (LONG-TERM) PLUS PROJECT

“Project Only” daily traffic volumes were added on top of “Cumulative (long-term) No Project” conditions traffic volumes to generate “Cumulative (long-term) plus Project” conditions traffic volumes. This chapter provides a description of cumulative long-term plus project roadway segment operations and roadway segment ADT volumes.

### 7.1 ROADWAY SEGMENTS OPERATIONS

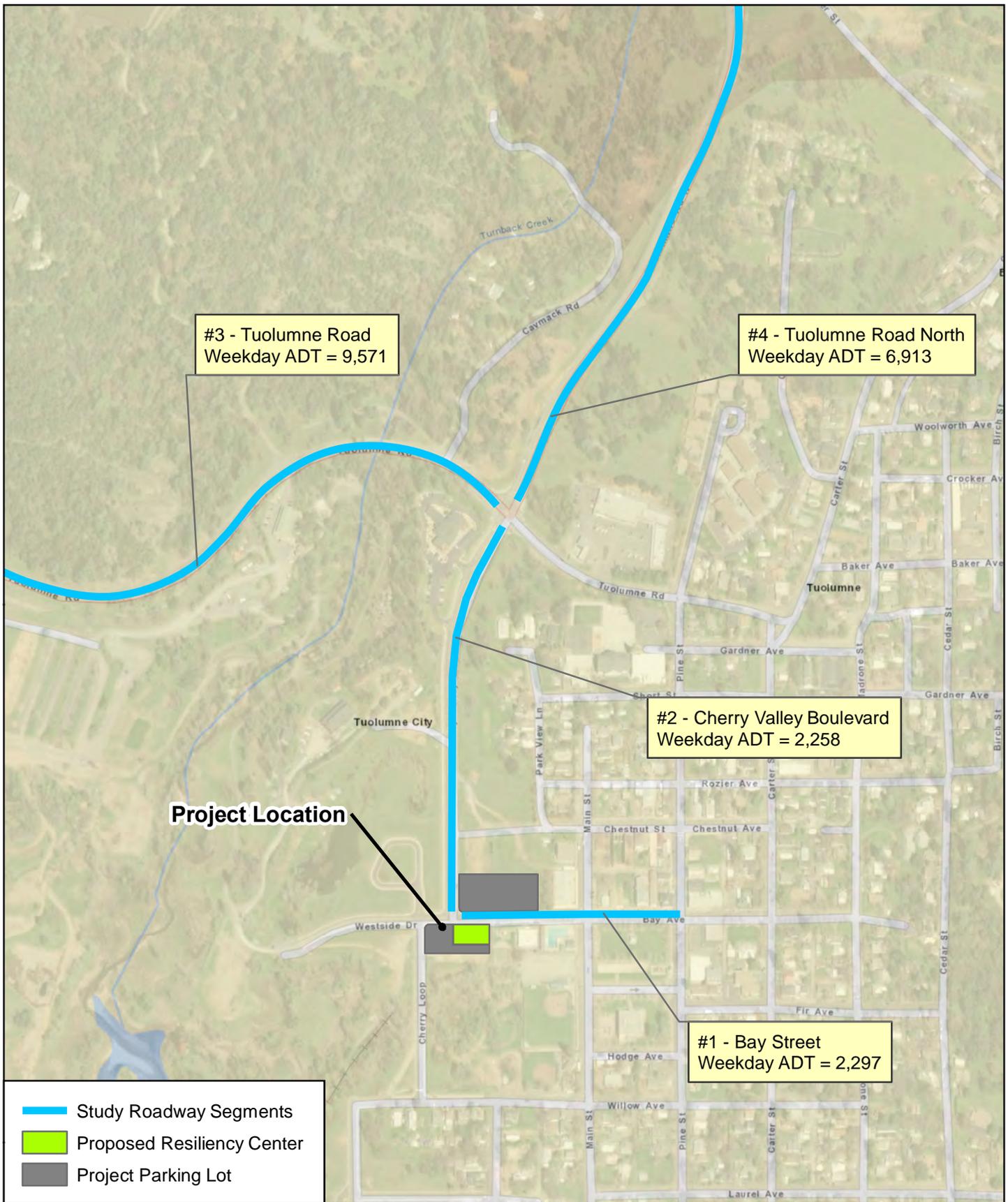
“Cumulative (long-term) plus Project” roadway segment operations were quantified under “Cumulative (long-term) plus Project” traffic volumes (shown in **Figure 8**). **Table 9** illustrates the resulting “Cumulative (long-term) plus Project” conditions roadway segment LOS operations. **Table 9** also contain “Cumulative (long-term) No Project” conditions roadway segment ADT and LOS for comparison purposes.

**Table 9. “Cumulative (long-term) plus Project” Conditions Roadway Segment Traffic Operations**

#	Roadway Segment	Type # <sup>1</sup>	Roadway Capacity	Min. LOS Std.	Cumulative (long-term) No Project Conditions		Cumulative (long-term) plus Project Conditions	
					ADT	LOS	ADT	LOS
1	Bay Street between Cherry Valley Boulevard and Pine Street	214	21,200	D	1,951	A	2,297	A
2	Cherry Valley Boulevard between Bay Street and Tuolumne Road	212	29,400	D	2,016	A	2,258	A
3	Tuolumne Road between Wards Ferry Road and Cherry Valley Boulevard	6	17,100	D	9,433	C	9,571	C
4	Tuolumne Road between Cherry Valley Boulevard and SR 108	6	17,100	D	6,809	B	6,913	C

Note:  
<sup>1</sup> Type # from **Table 1**. TCTC Generalized Roadway ADT LOS Lookup Table

As shown in **Table 9**, all study roadway segments are projected to operate at acceptable Level of Service (LOS “D” or better) under “Cumulative (long-term) plus Project” weekday daily conditions.



"Cumulative (long-term) plus Project" Traffic Volumes  
 Tuolumne Community Resiliency Center  
 Tuolumne County, CA  
 March 2019



Figure 8

## 8. IMPACTS AND MITIGATION MEASURES

This chapter of the TIS evaluates the study roadway segment operations results presented in **Table 5** (“Existing plus Project” conditions), **Table 7** (“Near-term plus Project” conditions), and **Table 9** (“Cumulative (long-term) plus Project” conditions) against the LOS impact criteria summarized in Section 1.5 of this report.

### 8.1 ROADWAY SEGMENTS

All study roadway segments are projected to operate at acceptable LOS under all study conditions. Therefore, the Project was found to have “less than significant” impacts on all four (4) study roadway segments under typical daily weekday conditions. No mitigation measures are recommended.

### 8.2 VEHICLE MILES TRAVELED

Based on the *General Plan and Regional Transportation Plan Update EIR Traffic Study* (Wood Rodgers Inc., August 2015), the current average trip length in Tuolumne County is 10.3 miles. This would provide a simple vehicle miles traveled (VMT) estimate of approximately 3,564 daily vehicle-miles per site (ADT \* average trip length).

An overall increase in VMT due to the Project may be anticipated. The expected daily usage of the Project site may lessen the VMT of Tuolumne residents who would otherwise need to drive further out of town to use a similar facility. However, the presence of the new resiliency center may draw new patrons, either from Tuolumne or from more distant rural communities who would not be willing to make the trip to a similar facility further away. Overall, it may be expected that the development of the Project would increase VMT in the region by a relatively small amount.

### 8.3 BICYCLE, PEDESTRIAN AND TRANSIT FACILITIES

Bike users will have to share travel way and/or shoulder space due to lack of striped bicycle lanes along Project site frontage.

Project visitors can use existing sidewalks along the Project site frontage. It is recommended to construct a pedestrian sidewalk along the south-east side of the additional Project parking lot frontage along the north side of Bay Street. It is also recommended to construct pedestrian crosswalks between the additional Project parking lot (northern parcel) and the Project building (southern Parcel), and at the Cherry Loop / Bay Street intersection.

Current Tuolumne County transit passes through the Project site frontage and provides connection from Tuolumne to Sonora. The Project is not projected to generate enough transit trips to exceed current transit route capacity. No mitigation measures are recommended.

## 9. SITE ACCESS AND CIRCULATION

This chapter includes discussion of Project parking, internal circulation, and sight distance at Project Driveways.

### 9.1 PROJECT PARKING

The Project is programmed to include a total of 200 parking spaces. As these 200 spaces would be greater than 50 percent of total daily Project trips, proposed parking is projected to be adequate.

### 9.2 PROJECT DRIVEWAYS AND INTERNAL CIRCULATION

Access to the Project site is currently proposed to occur at the following driveway locations:

- Cherry Loop Driveway: A two-lane access driveway that would extend east from Cherry Loop to provide access to the southern parcel. This driveway is proposed to be located approximately 175 feet south of Bay Street.
- Bay Street Driveway: A two-lane access driveway that would extend north from Bay Street to provide access to the northern parcel. This driveway is proposed to be located approximately 260 feet east of Cherry Valley Boulevard.
- Cherry Valley Boulevard Driveway: A two-lane access driveway that would extend east from Cherry Valley Boulevard to provide access to the northern parcel. This driveway is proposed to be located approximately 200 feet north of Bay Street.

The proposed driveways and internal parking isles should be designed to accommodate access for a County fire truck and other emergency vehicles. Each proposed parking lot should provide adequate space for emergency vehicles to turn around on site. All Project driveways are recommended to be one-way stop controlled. As the proposed Project will not generate a large amount of traffic, it is assumed the proposed internal parking isles can accommodate two-way traffic and can be yield controlled.

### 9.3 SIGHT DISTANCE AT PROJECT DRIVEWAYS AND DISTANCE BETWEEN APPROACHES

Driveway sight distances for the Project were analyzed against sight distance requirements for commercial roads/driveways contained in the *Tuolumne County Community Resources Agency Roads Division Encroachment Permit Information Packet* (Tuolumne County, 2014). The distances between the proposed Project driveways and the nearest approaches were also analyzed against the minimum recommended distances between a commercial approach and any other approach contained in the *County Encroachment Permit Information Packet*. **Table 10** shows the required and actual sight distances, as well as the required and actual distances between approaches, for all Project driveways. Required minimum intersection sight distance triangles at the three Project driveway locations are shown in **Appendix C**.

As shown in **Table 10**, all proposed Project driveways are projected to meet the County's sight distance and distance between approaches requirements. Note that the Cherry Valley Boulevard Driveway is located approximately 200 feet north of the Cherry Valley Boulevard / Bay Street "T" intersection (centerline to centerline), which is a shorter distance than the 275 feet of sight distance typically required by County guidelines on a road with a speed limit of 25 mph. However, any

northbound vehicles approaching the proposed Cherry Valley Boulevard Driveway would generally not be traveling at the full 85<sup>th</sup> percentile speed of the road as they would be turning onto Cherry Valley Boulevard from Bay Street and traveling at a lower speed (10-15 mph) to complete the turn. Assuming a vehicle turning onto Cherry Valley Boulevard from Bay Street is traveling approximately 15 mph, it can be estimated (via interpolation of County required sight distances) that the required sight distance for vehicles exiting the Cherry Valley Boulevard Driveway to view oncoming northbound vehicles would be approximately 165 feet.

**Table 10. Sight Distance at Project Driveways and Distance between Approaches**

Project Driveway	Speed Limit (mph) <sup>1</sup>	Origin of Oncoming Traffic	Required Minimum Sight Distance (ft) <sup>2</sup>	Actual Sight Distance (ft) <sup>3</sup>	Required Minimum Distance between Approaches (ft) <sup>4</sup>	Actual Distance to Nearest Approach (ft) <sup>5</sup>
Cherry Loop Driveway	25	Northbound Cherry Loop	275	275+	100	500
	25	Southbound Cherry Loop	275	275+	100	175
Bay Street Driveway	25	Westbound Bay Street	275	275+	100	260
	25	Eastbound Bay Street	275	275+	115	260
Cherry Valley Boulevard Driveway	15	Northbound Cherry Valley Boulevard	165 <sup>6</sup>	225	175	200
	25	Southbound Cherry Valley Boulevard	275	275+	175	500

*Notes:*

<sup>1</sup>Speed Limit of the cross street the driveway will be located on.

<sup>2</sup>Tuolumne County Community Resources Agency Roads Division Encroachment Permit Information Packet (Tuolumne County, 2014).

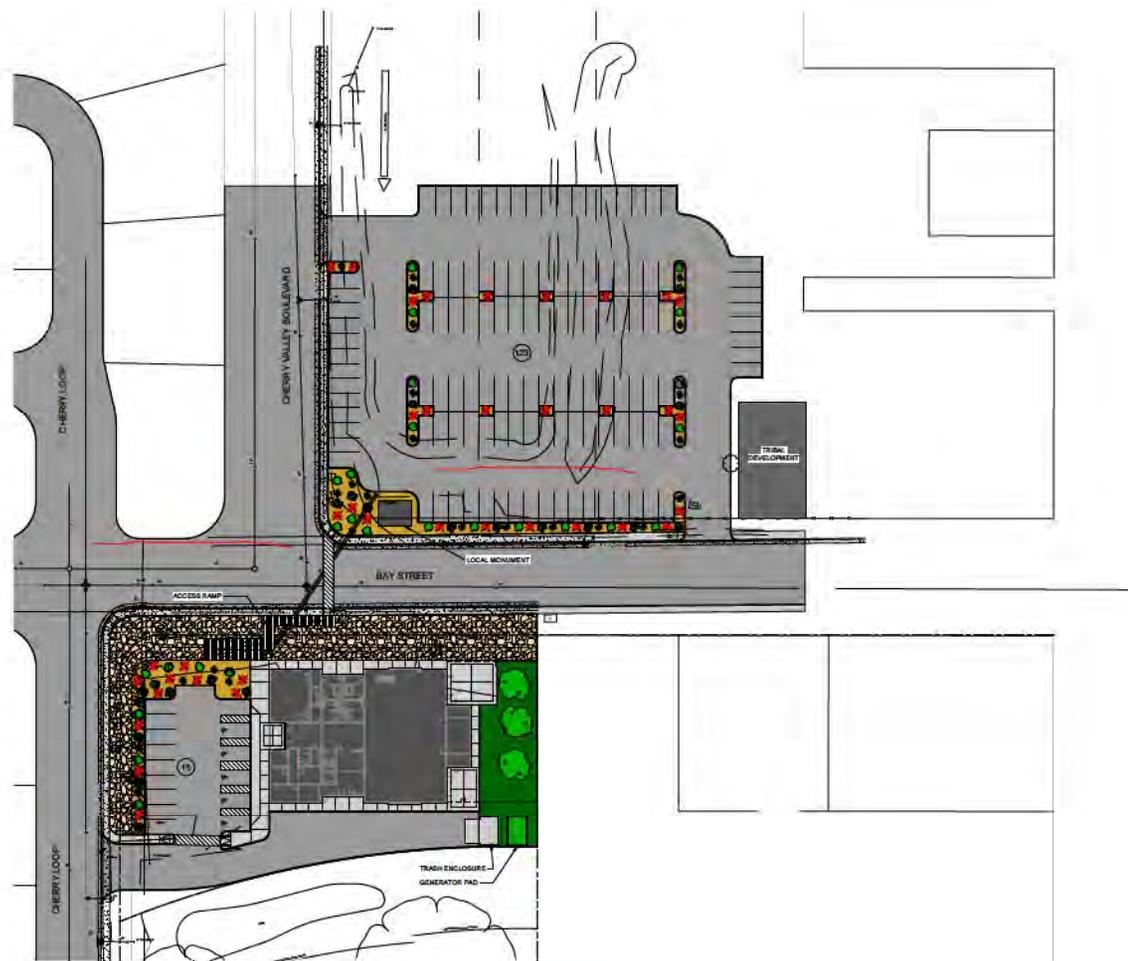
<sup>3</sup>Actual Sight Distance measured from aerial of Project site and Project site plan.

<sup>4</sup>Tuolumne County Community Resources Agency Roads Division Encroachment Permit Information Packet (Tuolumne County, 2014). Measured from centerline to centerline.

<sup>5</sup>Actual Distance to Nearest Approach measured from aerial of Project site and Project site plan (centerline to centerline).

<sup>6</sup>165 feet was calculated using interpolation of County required sight distance values. It was assumed northbound vehicles on Cherry Valley Boulevard approaching the driveway would be traveling approximately 15 miles per hour when turning from Bay Street.

**Appendix A**  
**Project Site Plan**



# TUOLUMNE CRC SITE PLAN

Tuolumne County Community Resilience Center (CRC) FEBRUARY 25, 2019



**Appendix B**  
Raw Count Sheets

### VOLUME

Bay Ave Bet. Cherry Valley Blvd & Pine St

Day: Tuesday  
Date: 10/16/2018

City: Tuolumne  
Project #: CA18\_7368\_001

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	750	780	1,530		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			2	1	3	12:00			9	11	20
00:15			0	0	0	12:15			14	12	26
00:30			0	0	0	12:30			8	5	13
00:45			1	3	2	12:45			11	42	53
01:00			1	2	3	13:00			9	7	16
01:15			1	1	2	13:15			10	9	19
01:30			0	1	1	13:30			9	15	24
01:45			1	3	4	13:45			12	40	52
02:00			1	0	1	14:00			8	8	16
02:15			0	1	1	14:15			14	9	23
02:30			1	0	1	14:30			16	18	34
02:45			0	2	2	14:45			19	57	76
03:00			0	0	0	15:00			12	14	26
03:15			1	1	2	15:15			11	13	24
03:30			0	3	3	15:30			16	14	30
03:45			1	2	3	15:45			16	55	71
04:00			0	0	0	16:00			20	11	31
04:15			1	1	2	16:15			19	20	39
04:30			1	2	3	16:30			19	16	35
04:45			0	2	2	16:45			16	74	90
05:00			0	3	3	17:00			33	19	52
05:15			1	4	5	17:15			30	14	44
05:30			1	4	5	17:30			21	14	35
05:45			3	5	8	17:45			23	107	130
06:00			0	7	7	18:00			10	11	21
06:15			4	8	12	18:15			20	15	35
06:30			3	9	12	18:30			17	28	45
06:45			3	10	13	18:45			13	60	73
07:00			4	17	21	19:00			15	10	25
07:15			6	12	18	19:15			9	10	19
07:30			10	27	37	19:30			5	2	7
07:45			26	46	72	19:45			7	36	43
08:00			12	14	26	20:00			6	6	12
08:15			9	15	24	20:15			6	5	11
08:30			7	11	18	20:30			9	8	17
08:45			6	34	40	20:45			4	25	29
09:00			9	9	18	21:00			8	4	12
09:15			9	14	23	21:15			6	4	10
09:30			7	10	17	21:30			5	4	9
09:45			6	31	37	21:45			5	24	29
10:00			9	7	16	22:00			5	2	7
10:15			10	13	23	22:15			2	2	4
10:30			5	19	24	22:30			7	3	10
10:45			6	30	36	22:45			3	17	20
11:00			10	9	19	23:00			2	1	3
11:15			9	13	22	23:15			0	0	0
11:30			10	9	19	23:30			1	0	1
11:45			12	41	53	23:45			1	4	5
<b>TOTALS</b>			209	338	547	<b>TOTALS</b>			541	442	983
<b>SPLIT %</b>			38.2%	61.8%	35.8%	<b>SPLIT %</b>			55.0%	45.0%	64.2%

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	750	780	1,530		
AM Peak Hour			07:30	07:00	07:30	PM Peak Hour			17:00	18:00	17:00
AM Pk Volume			57	78	135	PM Pk Volume			107	71	162
Pk Hr Factor			0.548	0.722	0.703	Pk Hr Factor			0.811	0.634	0.779
7 - 9 Volume	0	0	80	126	206	4 - 6 Volume	0	0	181	112	293
7 - 9 Peak Hour			07:30	07:00	07:30	4 - 6 Peak Hour			17:00	16:15	17:00
7 - 9 Pk Volume	0	0	57	78	135	4 - 6 Pk Volume	0	0	107	65	162
Pk Hr Factor	0.000	0.000	0.548	0.722	0.703	Pk Hr Factor	0.000	0.000	0.811	0.813	0.779

### VOLUME

Cherry Valley Blvd Bet. Bay Ave & Tuolumne Rd

Day: Tuesday  
Date: 10/16/2018

City: Tuolumne  
Project #: CA18\_7368\_002

DAILY TOTALS					NB	SB	EB	WB	Total		
					790	791	0	0	1,581		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	2	4			6	12:00	10	12			22
00:15	0	0			0	12:15	13	13			26
00:30	1	1			2	12:30	6	9			15
00:45	1	4	1	6	2	12:45	8	37	14	48	22
01:00	2	1			3	13:00	6	8			14
01:15	1	2			3	13:15	11	14			25
01:30	1	0			1	13:30	14	9			23
01:45	0	4	1	4	1	13:45	14	45	10	41	24
02:00	0	1			1	14:00	9	9			18
02:15	2	0			2	14:15	8	15			23
02:30	0	1			1	14:30	19	15			34
02:45	1	3	0	2	1	14:45	10	46	23	62	33
03:00	0	0			0	15:00	14	11			25
03:15	1	1			2	15:15	14	10			24
03:30	3	0			3	15:30	14	18			32
03:45	1	5	2	3	3	15:45	13	55	15	54	28
04:00	0	0			0	16:00	11	20			31
04:15	1	1			2	16:15	20	17			37
04:30	3	2			5	16:30	15	19			34
04:45	3	7	0	3	3	16:45	11	57	20	76	31
05:00	3	0			3	17:00	19	30			49
05:15	3	0			3	17:15	11	32			43
05:30	4	1			5	17:30	16	20			36
05:45	4	14	3	4	7	17:45	8	54	22	104	30
06:00	7	0			7	18:00	12	10			22
06:15	8	4			12	18:15	14	23			37
06:30	9	3			12	18:30	29	15			44
06:45	14	38	5	12	19	18:45	17	72	11	59	28
07:00	17	6			23	19:00	10	15			25
07:15	12	7			19	19:15	10	9			19
07:30	29	11			40	19:30	2	5			7
07:45	21	79	28	52	49	19:45	6	28	8	37	14
08:00	15	14			29	20:00	6	5			11
08:15	15	11			26	20:15	5	6			11
08:30	10	7			17	20:30	8	9			17
08:45	9	49	8	40	17	20:45	4	23	5	25	9
09:00	9	12			21	21:00	5	8			13
09:15	15	9			24	21:15	3	5			8
09:30	13	10			23	21:30	5	5			10
09:45	11	48	6	37	17	21:45	5	18	6	24	11
10:00	4	10			14	22:00	3	5			8
10:15	13	10			23	22:15	2	2			4
10:30	18	6			24	22:30	3	7			10
10:45	13	48	3	29	16	22:45	1	9	3	17	4
11:00	8	12			20	23:00	1	2			3
11:15	15	12			27	23:15	0	0			0
11:30	10	11			21	23:30	0	1			1
11:45	12	45	13	48	25	23:45	1	2	1	4	2
<b>TOTALS</b>	<b>344</b>	<b>240</b>			<b>584</b>	<b>TOTALS</b>	<b>446</b>	<b>551</b>			<b>997</b>
<b>SPLIT %</b>	<b>58.9%</b>	<b>41.1%</b>			<b>36.9%</b>	<b>SPLIT %</b>	<b>44.7%</b>	<b>55.3%</b>			<b>63.1%</b>

DAILY TOTALS					NB	SB	EB	WB	Total
					790	791	0	0	1,581

AM Peak Hour	07:30	07:30			07:30	PM Peak Hour	18:00	17:00			16:45
AM Pk Volume	80	64			144	PM Pk Volume	72	104			159
Pk Hr Factor	0.690	0.571			0.735	Pk Hr Factor	0.621	0.813			0.811
7 - 9 Volume	128	92	0	0	220	4 - 6 Volume	111	180	0	0	291
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	16:15	17:00			16:45
7 - 9 Pk Volume	80	64	0	0	144	4 - 6 Pk Volume	65	104	0	0	159
Pk Hr Factor	0.690	0.571	0.000	0.000	0.735	Pk Hr Factor	0.813	0.813	0.000	0.000	0.811

### VOLUME

Tuolumne Rd W/O Cherry Valley Blvd

Day: Tuesday  
Date: 10/16/2018

City: Tuolumne  
Project #: CA18\_7368\_003

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	4,286	4,212	8,498					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			6	14	20	12:00			71	57	128			
00:15			8	15	23	12:15			76	67	143			
00:30			6	14	20	12:30			51	40	91			
00:45			2	22	13	12:45			77	275	38	202	115	477
01:00			3	13	16	13:00			62	48	110			
01:15			9	15	24	13:15			67	67	134			
01:30			7	6	13	13:30			76	57	133			
01:45			3	22	13	13:45			83	288	60	232	143	520
02:00			10	7	17	14:00			84	78	162			
02:15			8	6	14	14:15			109	68	177			
02:30			4	10	14	14:30			81	72	153			
02:45			5	27	8	14:45			95	369	72	290	167	659
03:00			8	8	16	15:00			83	106	189			
03:15			7	8	15	15:15			83	98	181			
03:30			6	12	18	15:30			77	103	180			
03:45			3	24	4	15:45			86	329	70	377	156	706
04:00			6	14	20	16:00			96	74	170			
04:15			9	14	23	16:15			105	100	205			
04:30			5	7	12	16:30			110	84	194			
04:45			8	28	13	16:45			91	402	88	346	179	748
05:00			10	16	26	17:00			91	91	182			
05:15			9	20	29	17:15			93	79	172			
05:30			18	21	39	17:30			95	67	162			
05:45			20	57	24	17:45			68	347	44	281	112	628
06:00			6	34	40	18:00			78	53	131			
06:15			25	45	70	18:15			86	61	147			
06:30			34	45	79	18:30			45	57	102			
06:45			44	109	48	18:45			74	283	48	219	122	502
07:00			29	58	87	19:00			73	32	105			
07:15			47	72	119	19:15			67	43	110			
07:30			83	127	210	19:30			47	27	74			
07:45			122	281	126	19:45			41	228	16	118	57	346
08:00			84	83	167	20:00			49	29	78			
08:15			50	67	117	20:15			42	17	59			
08:30			46	54	100	20:30			36	38	74			
08:45			55	235	45	20:45			32	159	48	132	80	291
09:00			39	43	82	21:00			23	35	58			
09:15			42	51	93	21:15			33	27	60			
09:30			48	52	100	21:30			25	21	46			
09:45			43	172	52	21:45			23	104	32	115	55	219
10:00			46	60	106	22:00			22	24	46			
10:15			32	55	87	22:15			26	31	57			
10:30			51	48	99	22:30			9	20	29			
10:45			53	182	52	22:45			17	74	28	103	45	177
11:00			47	39	86	23:00			15	36	51			
11:15			57	50	107	23:15			11	19	30			
11:30			54	48	102	23:30			9	12	21			
11:45			61	219	59	23:45			15	50	22	89	37	139
<b>TOTALS</b>				1378	1708	<b>3086</b>	<b>TOTALS</b>			2908	2504	<b>5412</b>		
<b>SPLIT %</b>				44.7%	55.3%	<b>36.3%</b>	<b>SPLIT %</b>			53.7%	46.3%	<b>63.7%</b>		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	4,286	4,212	8,498

AM Peak Hour			07:30	07:15	07:15	PM Peak Hour			16:00	14:45	16:15
AM Pk Volume			339	408	744	PM Pk Volume			402	379	760
Pk Hr Factor			0.695	0.803	0.750	Pk Hr Factor			0.914	0.894	0.927
7 - 9 Volume	0	0	516	632	1148	4 - 6 Volume	0	0	749	627	1376
7 - 9 Peak Hour			07:30	07:15	07:15	4 - 6 Peak Hour			16:00	16:15	16:15
7 - 9 Pk Volume	0	0	339	408	744	4 - 6 Pk Volume	0	0	402	363	760
Pk Hr Factor	0.000	0.000	0.695	0.803	0.750	Pk Hr Factor	0.000	0.000	0.914	0.908	0.927

### VOLUME

Tuolumne Rd W/O Cherry Valley Blvd

Day: Saturday  
Date: 10/20/2018

City: Tuolumne  
Project #: CA18\_7368\_003

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	4,462	4,327	8,789		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			15	43	58	12:00			74	54	128
00:15			12	33	45	12:15			48	59	107
00:30			10	37	47	12:30			60	53	113
00:45			10	47	57	12:45			63	245	308
01:00			8	32	40	13:00			70	64	134
01:15			8	34	42	13:15			68	71	139
01:30			6	38	44	13:30			77	61	138
01:45			8	30	38	13:45			49	264	313
02:00			7	33	40	14:00			77	78	155
02:15			11	27	38	14:15			87	87	174
02:30			3	32	35	14:30			75	61	136
02:45			4	25	29	14:45			65	304	369
03:00			5	14	19	15:00			87	60	147
03:15			6	18	24	15:15			78	70	148
03:30			5	16	21	15:30			73	65	138
03:45			6	22	28	15:45			81	319	400
04:00			2	16	18	16:00			80	48	128
04:15			6	14	20	16:15			99	56	155
04:30			7	15	22	16:30			74	65	139
04:45			8	23	31	16:45			92	345	437
05:00			13	12	25	17:00			82	64	146
05:15			13	16	29	17:15			95	56	151
05:30			11	8	19	17:30			87	56	143
05:45			20	57	77	17:45			82	346	428
06:00			14	14	28	18:00			79	69	148
06:15			14	32	46	18:15			98	64	162
06:30			31	33	64	18:30			116	60	176
06:45			18	77	95	18:45			75	368	443
07:00			30	28	58	19:00			69	39	108
07:15			19	32	51	19:15			67	37	104
07:30			34	28	62	19:30			80	38	118
07:45			29	112	141	19:45			64	280	344
08:00			33	39	72	20:00			82	37	119
08:15			44	41	85	20:15			72	48	120
08:30			24	61	85	20:30			57	56	113
08:45			62	163	225	20:45			54	265	319
09:00			46	42	88	21:00			57	60	117
09:15			47	43	90	21:15			45	52	97
09:30			59	59	118	21:30			43	65	108
09:45			61	213	274	21:45			56	201	257
10:00			55	52	107	22:00			51	53	104
10:15			54	41	95	22:15			18	66	84
10:30			69	55	124	22:30			38	64	102
10:45			76	254	330	22:45			30	137	167
11:00			78	72	150	23:00			23	51	74
11:15			64	73	137	23:15			19	61	80
11:30			72	56	128	23:30			19	39	58
11:45			72	286	358	23:45			18	79	97
<b>TOTALS</b>			1309	1607	2916	<b>TOTALS</b>			3153	2720	5873
<b>SPLIT %</b>			44.9%	55.1%	33.2%	<b>SPLIT %</b>			53.7%	46.3%	66.8%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	4,462	4,327	8,789

AM Peak Hour			10:45	10:45	10:45	PM Peak Hour			17:45	13:30	17:45
AM Pk Volume			290	271	561	PM Pk Volume			375	301	676
Pk Hr Factor			0.929	0.928	0.935	Pk Hr Factor			0.808	0.865	0.892
7 - 9 Volume	0	0	275	307	582	4 - 6 Volume	0	0	691	455	1146
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:45	17:00	16:15
7 - 9 Pk Volume	0	0	163	185	348	4 - 6 Pk Volume	0	0	356	236	592
Pk Hr Factor	0.000	0.000	0.657	0.758	0.821	Pk Hr Factor	0.000	0.000	0.937	0.922	0.939

# VOLUME

Tuolumne Rd N/O Cherry Valley Blvd

Day: Tuesday  
Date: 10/16/2018

City: Tuolumne  
Project #: CA18\_7368\_004

DAILY TOTALS					NB	SB	EB	WB	Total		
					3,102	3,032	0	0	6,134		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	5	9			14	12:00	56	45			101
00:15	9	16			25	12:15	53	49			102
00:30	4	12			16	12:30	43	34			77
00:45	2	20	14	51	16	12:45	52	204	35	163	87
01:00	4	14			18	13:00	46	45			91
01:15	6	15			21	13:15	48	48			96
01:30	7	7			14	13:30	51	46			97
01:45	3	20	13	49	16	13:45	66	211	48	187	114
02:00	8	7			15	14:00	54	62			116
02:15	13	6			19	14:15	54	58			112
02:30	4	13			17	14:30	57	51			108
02:45	4	29	7	33	11	14:45	57	222	59	230	116
03:00	6	6			12	15:00	58	66			124
03:15	6	6			12	15:15	49	50			99
03:30	6	9			15	15:30	45	68			113
03:45	2	20	5	26	7	15:45	55	207	44	228	99
04:00	3	10			13	16:00	70	61			131
04:15	7	10			17	16:15	64	60			124
04:30	4	6			10	16:30	65	65			130
04:45	4	18	8	34	12	16:45	62	261	62	248	124
05:00	8	7			15	17:00	56	76			132
05:15	8	10			18	17:15	61	53			114
05:30	16	11			27	17:30	69	44			113
05:45	14	46	12	40	26	17:45	42	228	33	206	75
06:00	9	19			28	18:00	59	38			97
06:15	16	25			41	18:15	60	43			103
06:30	29	24			53	18:30	41	32			73
06:45	39	93	31	99	70	18:45	58	218	42	155	100
07:00	22	30			52	19:00	63	27			90
07:15	24	35			59	19:15	47	36			83
07:30	54	83			137	19:30	37	26			63
07:45	82	182	71	219	153	19:45	36	183	18	107	54
08:00	63	38			101	20:00	35	26			61
08:15	42	39			81	20:15	41	22			63
08:30	30	27			57	20:30	34	30			64
08:45	50	185	32	136	82	20:45	29	139	44	122	73
09:00	25	21			46	21:00	17	34			51
09:15	42	24			66	21:15	28	27			55
09:30	34	28			62	21:30	23	23			46
09:45	38	139	32	105	70	21:45	23	91	36	120	59
10:00	23	49			72	22:00	21	26			47
10:15	21	41			62	22:15	21	32			53
10:30	37	30			67	22:30	9	24			33
10:45	33	114	29	149	62	22:45	11	62	26	108	37
11:00	34	24			58	23:00	8	33			41
11:15	41	28			69	23:15	13	18			31
11:30	47	34			81	23:30	6	15			21
11:45	52	174	44	130	96	23:45	9	36	21	87	30
<b>TOTALS</b>	<b>1040</b>	<b>1071</b>			<b>2111</b>	<b>TOTALS</b>	<b>2062</b>	<b>1961</b>			<b>4023</b>
<b>SPLIT %</b>	<b>49.3%</b>	<b>50.7%</b>			<b>34.4%</b>	<b>SPLIT %</b>	<b>51.3%</b>	<b>48.7%</b>			<b>65.6%</b>

DAILY TOTALS					NB	SB	EB	WB	Total		
					3,102	3,032	0	0	6,134		
AM Peak Hour	07:30	07:30			07:30	PM Peak Hour	16:00	16:15			16:15
AM Pk Volume	241	231			472	PM Pk Volume	261	263			510
Pk Hr Factor	0.735	0.696			0.771	Pk Hr Factor	0.932	0.865			0.966
7 - 9 Volume	367	355	0	0	722	4 - 6 Volume	489	454	0	0	943
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	241	231	0	0	472	4 - 6 Pk Volume	261	263	0	0	510
Pk Hr Factor	0.735	0.696	0.000	0.000	0.771	Pk Hr Factor	0.932	0.865	0.000	0.000	0.966

## **Appendix C**

### **Required Minimum Intersection Sight Distance Triangles**

APPENDIX C: SIGHT DISTANCE TRIANGLE EXHIBIT

# CHERRY LOOP DRIVEWAY

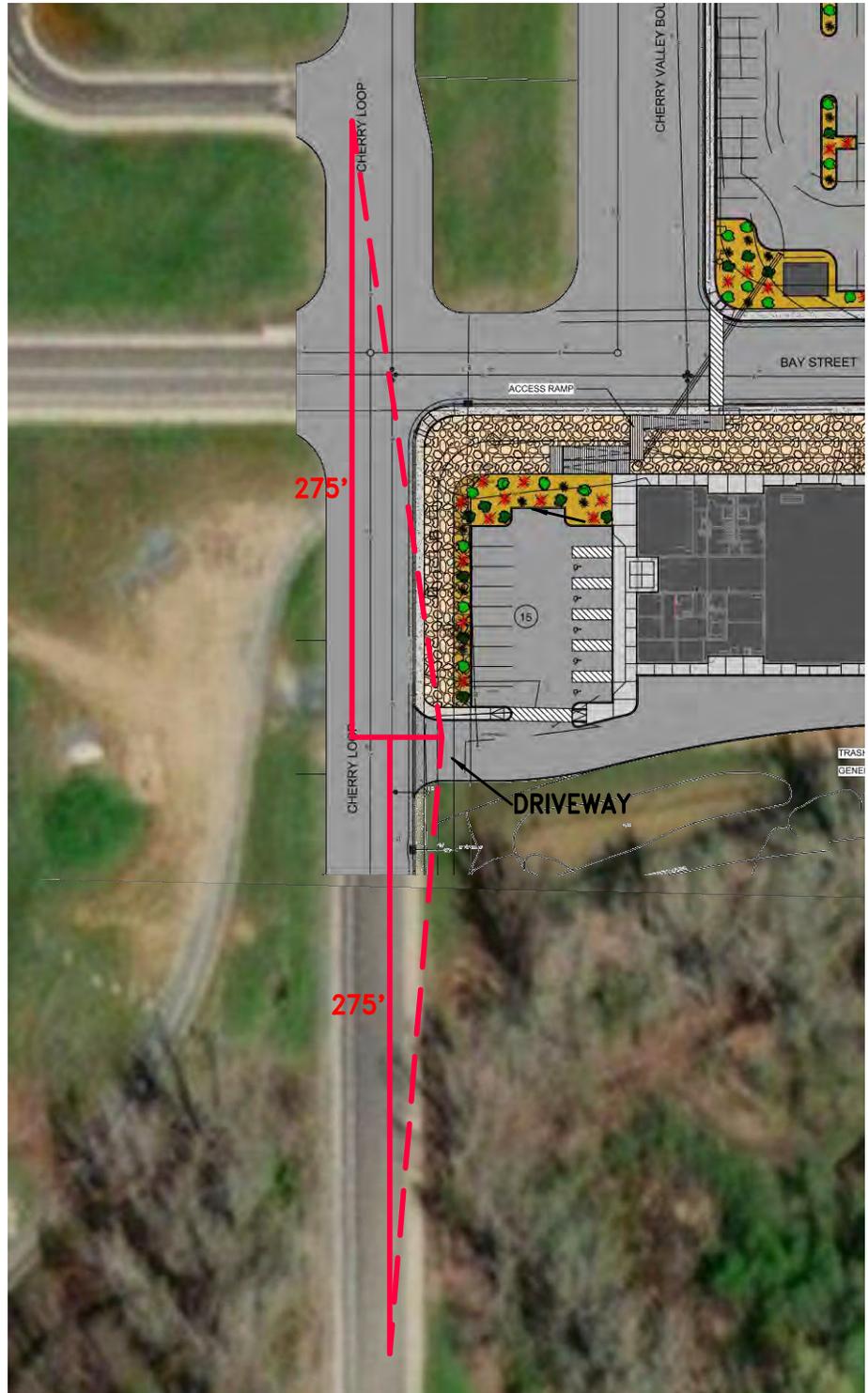
TUOLUMNE

MARCH 2019

CALIFORNIA



= MINIMUM  
REQUIRED  
INTERSECTION  
SIGHT  
DISTANCE  
TRIANGLE



SCALE: 1" = 80'



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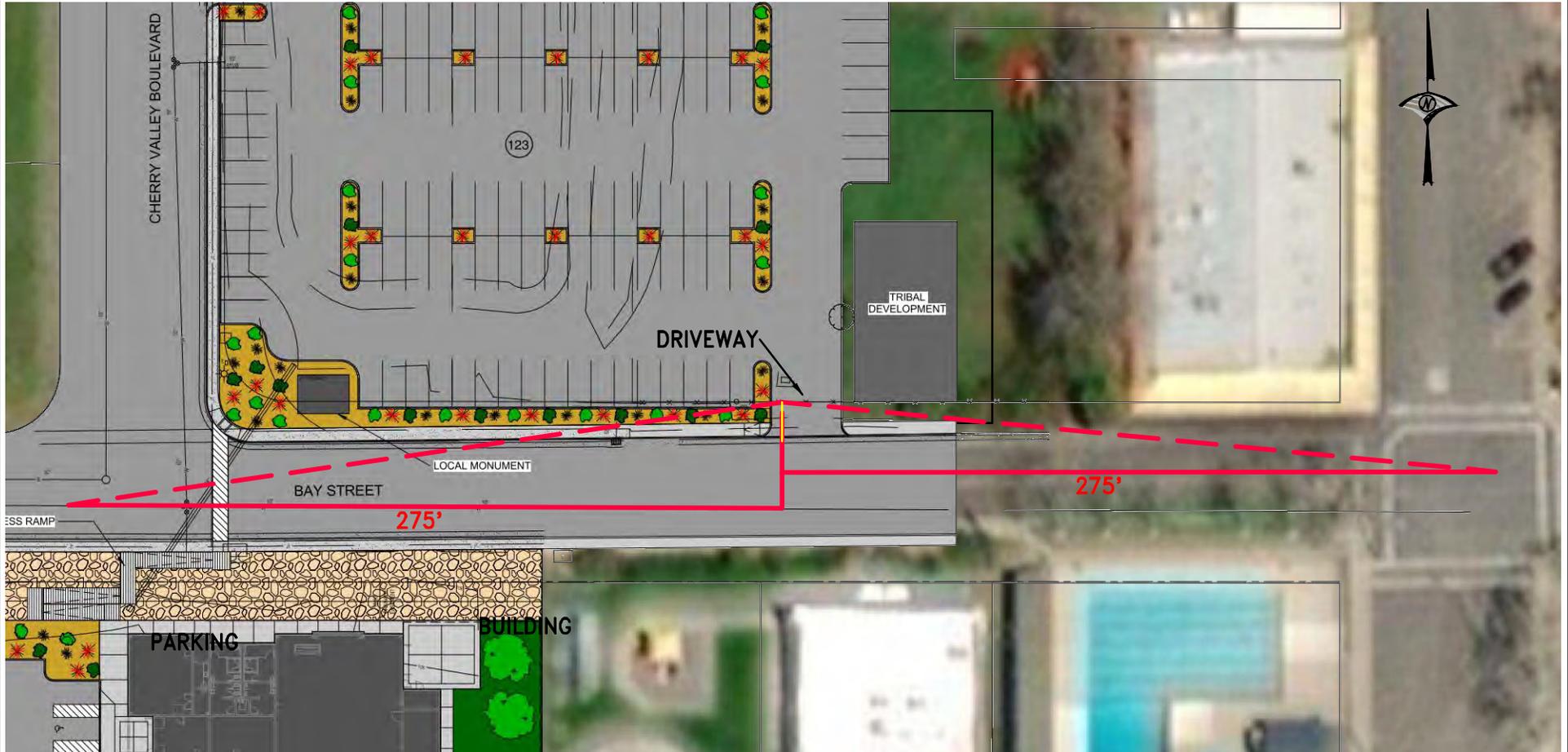
SACRAMENTO, CA 95816 FAX 916.341.7767

# APPENDIX C: SIGHT DISTANCE TRIANGLE EXHIBIT BAY STREET DRIVEWAY

TUOLUMNE

CALIFORNIA

MARCH 2019



= MINIMUM REQUIRED INTERSECTION SIGHT DISTANCE TRIANGLE



SCALE: 1" = 60'



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# APPENDIX C: SIGHT DISTANCE TRIANGLE EXHIBIT CHERRY VALLEY BOULEVARD DRIVEWAY

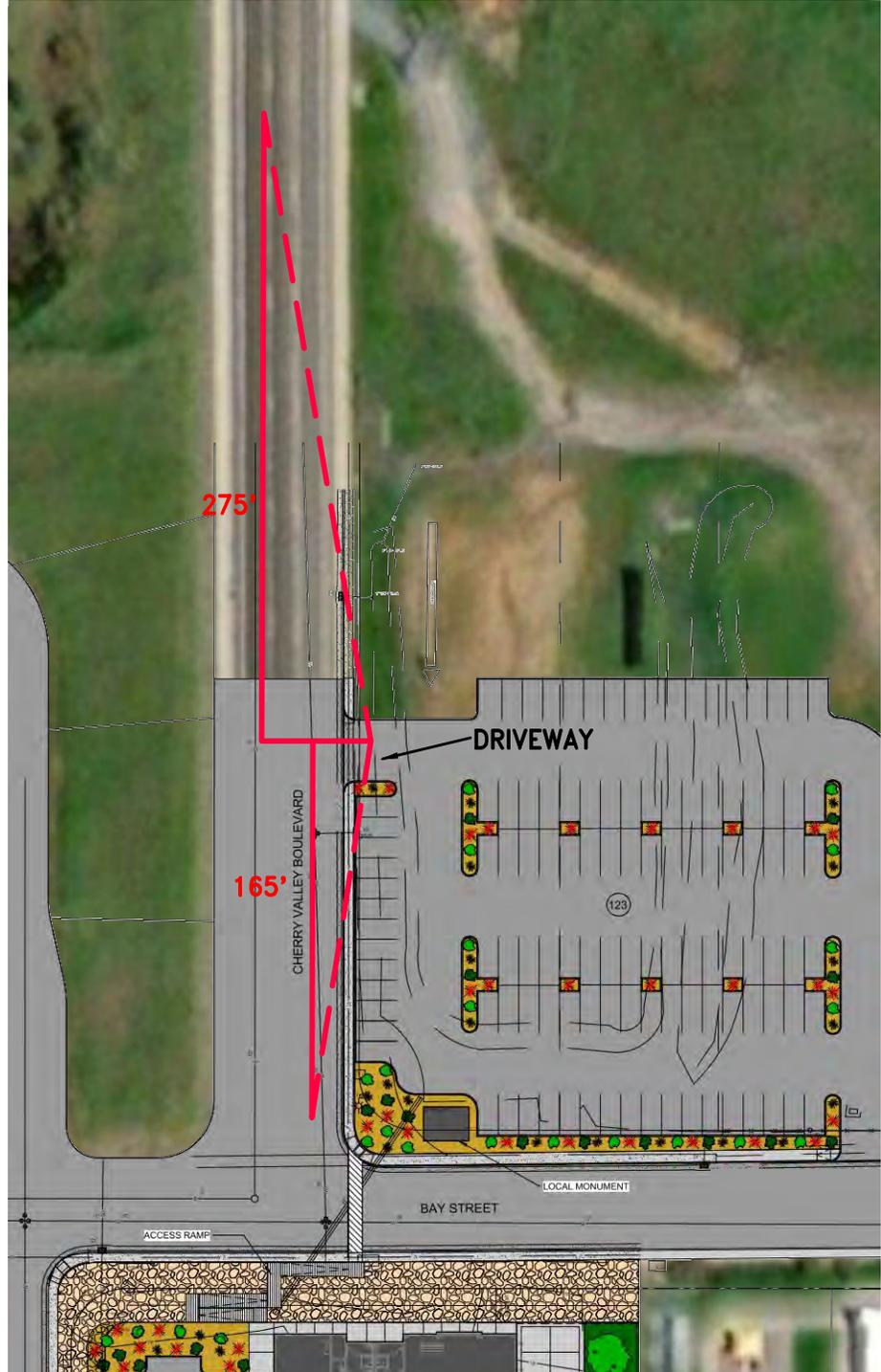
TUOLUMNE

MARCH 2019

CALIFORNIA



= MINIMUM  
REQUIRED  
INTERSECTION  
SIGHT  
DISTANCE  
TRIANGLE



SCALE: 1" = 80'



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